# Inventor search history

```
=> d his L71
```

```
(FILE 'HCAPLUS' ENTERED AT 13:25:50 ON 07 DEC 2007)
L71 6 S L66 OR L69 OR L70
```

```
=> d que L71
          214 SEA FILE=HCAPLUS ABB=ON PLU=ON KESSLER S?/AU
         60994 SEA FILE=HCAPLUS ABB=ON PLU=ON LEE S?/AU
L65
         2 SEA FILE=HCAPLUS ABB=ON PLU=ON L64 AND L65
L66
        61206 SEA FILE=HCAPLUS ABB=ON PLU=ON L64 OR L65
L67
           13 SEA FILE=HCAPLUS ABB=ON PLU=ON L67 AND SCHOTT?/CO,CS,PA,SO
L68
             5 SEA FILE=HCAPLUS ABB=ON PLU=ON L68 AND (COSMET? OR PHARMAC?
L69
              OR DERM? OR SKIN?)
            O SEA FILE=HCAPLUS ABB=ON PLU=ON L68 AND (NITR?(3A)OXID?)
L70
           6 SEA FILE=HCAPLUS ABB=ON PLU=ON L66 OR L69 OR L70
L71
```

#### => d his L83

(FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU' ENTERED AT 13:57:32 ON 07 DEC 2007)
L83
3 S L81 OR L82
SAVE TEMP L83 BRO278MLIN/A

=> d	que L83					
L64	214	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	KESSLER S?/AU
L65	60994	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	LEE S?/AU
L66	2	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L64 AND L65
L67			FILE=HCAPLUS			L64 OR L65
L68	13	SÉA	FILE=HCAPLUS	ABB=ON	PLU=ON	L67 AND SCHOTT?/CO,CS,PA,SO
L81	1	SEA	L66			
L82	3	SEA	L68			
L83	3	SEA	L81 OR L82			

#### => dup rem L71 L83

FILE 'HCAPLUS' ENTERED AT 14:11:22 ON 07 DEC 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BIOSIS' ENTERED AT 14:11:22 ON 07 DEC 2007 Copyright (c) 2007 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 14:11:22 ON 07 DEC 2007
Copyright (c) 2007 Elsevier B.V. All rights reserved.
PROCESSING COMPLETED FOR L71
PROCESSING COMPLETED FOR L83
L84 9 DUP REM L71 L83 (0 DUPLICATES REMOVED

9 DUP REM L71 L83 (0 DUPLICATES REMOVED)
ANSWERS '1-6' FROM FILE HCAPLUS
ANSWERS '7-8' FROM FILE BIOSIS
ANSWER '9' FROM FILE EMBASE

### Inventor search results

=> d L84 1-9 ibib abs

L84 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:50802 HCAPLUS Full-text

DOCUMENT NUMBER: 142:139562

TITLE: Use of a glass composition with the aim of attaining

an antioxidative effect

INVENTOR(S): Fechner, Joerg Hinrich; Zimmer, Jose; Lee,

Sean

PATENT ASSIGNEE(S): Schott A.-G., Germany SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					KIND DATE			APPLICATION NO.						D.	ATE		
	<del>-</del>	<b></b>				-	<b>-</b> -								-			
EP	149	8395			A1		2005	0119	;	EP 2	004-	1032	71		2	0040	709	
EP	149	8395			В1		2007	1010										
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	HR
DE	103	32011			A1		2005	0217		DE 2	003-	1033	2011		2	0030.	714	
AT	375	325			T		2007	1015		AT 2	004-	1032	71		2	0040	709	
JP	200	50481	70		Α		2005	0224		JP 2	004-	2041	95		2	0040	712	
US	200	50138	73		`A1		2005	0120	,	US 2	004-	8892	12		2	0040	713	
CN	160	3263			Α		2005	0406		CN 2	004-	1006	8893		2	0040	714	
PRIORIT	Y AP	PLN.	INFO	.:						DE 2	003-	1033	2011		A 2	0030	714	

The invention concerns the use of glass compns. in the form of glass powders, glass ceramics, fibers, granulates, spheres to obtain an anti-oxidative effect. The soda-lime or phosphate glass compns. can be versatile, as in cosmetics products, medicine products, food, colors and lacquers, plasters, cements and concrete, in anti-fouling products and in polymers. Due to the high photo- and thermal stability, the antioxidants are usually selected from organic substances. Besides, the glass compns. are suitable for the contact with humans, and are toxicol. harmless and environmental contractual.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:1285511 HCAPLUS Full-text

DOCUMENT NUMBER: 144:27584

TITLE: Use of silicon-containing and phosphorus-free glass

for the treatment of inflammatory diseases

INVENTOR(S): Lee, Sean; Zimmer, Jose; Rosati, Coni

PATENT ASSIGNEE(S): Schott AG, Germany SOURCE: Ger. Offen., 9 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102004023732	A1	20051208	DE 2004-102004023732	20040511

PRIORITY APPLN. INFO.:

DE 2004-102004023732 20040511

The invention concerns the use of silicon-containing and phosphorus-free glass AB for the treatment of inflammatory diseases in various delivery systems. Typical glass compns. are (weight/weight%): silica 1-100; boron trioxide 0-80; sodium oxide 0-65; lithium oxide 0-0.65; potassium oxide 0-0.65; calcium oxide 0-0.35; magnesium oxide 0-0.25; barium oxide 0-0.35; zinc oxide 0-0.30;. Oxidized or reduced forms of silver, copper, iodine and fluorine can be added. Oral, parenteral, rectal, vaginal delivery systems are prepared for the treatment of eyes, nose, autoimmune diseases, allergies, arthritis, dermatoses and gastrointestinal diseases.

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2007 ACS on STN

1

ACCESSION NUMBER:

2003:472462 HCAPLUS Full-text

DOCUMENT NUMBER:

139:40430

TITLE:

UV-absorbing, antimicrobial, and anti-inflammatory

glass ceramic .

INVENTOR(S):

Fechner, Joerg H.; Zimmer, Jose; Schnabel, Roland;

Mitra, Ina; Lee, Sean

PATENT ASSIGNEE(S):

Schott Glas, Germany; Carl-Zeiss-Stiftung

SOURCE:

PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.						KIND DATE			APPLICATION NO.					D	ATE	
						-									-	00011	
WO	20030	0500!	52		AΙ		2003	1619	,	WO 2	002-I	SPIS	389		2	00212	207
	W:										BG,						
		CO,	CR,	CU,	CZ,	DΕ,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	KZ,	LC,	LK,	LR,
	LS, LT, LU			LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,
	PL, PT, RO			RO,	RU,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	UΑ,
	UG, US, UZ		UΖ,	VN,	YU,	ZA,	ZM,	ZW									
	RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	ΑZ,	BY,
				-							CH,						
											PT,					BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,			
DE	DE 10161075						2003	0821	DE 2001-10161075						2	0011	212
AU	AU 2002358105					A1 20030623 AU 20			AU 2002-358105				2	0021	207		
PRIORIT	RIORITY APPLN. INFO.:							:	DE. 2	001-	1016	1075	I	A 2	0011	212	
•									1	WO 2	002-1	EP13	889	V	<b>V</b> 2	0021	207

The glass ceramic contains SiO2 35-65, Na2O 5-30, K2O 0-20, CaO 5-30, MgO 0-AB 10, Al203 0-5, P205 2-10, B203 0-5, and TiO2 0.1-10 weight%. The invention is characterized in that the crystalline primary phases contain alkali-alkaline earth silicates and/or alkaline earth silicates and/or alkali silicates.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:941593 HCAPLUS Full-text

3

DOCUMENT NUMBER:

141:59157

TITLE:

Bioactive glasses: a potential new class of active

ingredients for personal care products

AUTHOR(S):

Lee, S.; Zimmer, J.; Fechner, J.; Uzunian,

G. E.; Song, L.

CORPORATE SOURCE:

Schott Glas, Mainz, 55122, Germany

SOURCE: SOFW Journal (2003), 129(9), 29-30,32-33,36-37

CODEN: SOFJEE; ISSN: 0942-7694

PUBLISHER: Verlag fuer Chemische Industrie H. Ziolkowsky

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review discusses the biol. activity of glass and the applications of bioactive glasses in cosmetics and personal care. Bioactive glasses are known to the biomaterials and medical implant device community mainly as bone grafting materials.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:716041 HCAPLUS <u>Full-text</u>
DOCUMENT NUMBER: 137:237800

TITLE: Use of bioactive glass in dental filling material

INVENTOR(S): Kessler, Susanne; Lee, Sean

PATENT ASSIGNEE(S): Schott Glas, Germany; Carl-Zeiss-Stiftung

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA'I	ENT I	. 01						APPLICATION NO.						D	ATE		
			<b>-</b> -													-		
	WO	2002															0020	-
		W:										BG,						
												EE,						
												KG,						
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	US,	UZ,	VN,	ΥU,	ZA,	ZM,	ZW							
		RW:	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
			BF,	ВJ,	CF,	CG,						GW,						
	DE 10111449					<b>A1</b>		2002	0926		DE 2	2001-	1011	1449		2	0010	309
	ΑU	2002	2548	56		A1						2002-						
	ΕP	1365	727			A1 20031203				EP 2	2002-	7241	00		2	0020	308	
		R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	CN	1496	244			Α		2004	0512		CN 2	2002-	8062	70		2	0020	308
	JP	2004	5211	35		T		2004	0715		JP 2	2002-	5709	98		2	0020	308
	BR	2002	0079	47		Α		2004	0727		BR - 2	2002-	7947			2	0020	308
	IN 2003CN01375					Α		2005	1125	5 IN 2003-CN1375						2	0030	901
	US 2004065228					A1		2004	0408		US 2	2003-	4711	48		2	0031	103
	US 7090720							2006	0815									
PRIO	PRIORITY APPLN. INFO.:										DE 2	2001-	1011	1449		A 2	0010	309
											WO 2	2002-	DE82	7		W 2	0020	308

The invention relates to the use of a mixture of bioactive glass and dental glass for producing an agent for a permanent dental filling. The bioactive glass is preferably contained in a binding agent for binding a dental filling to a tooth, in a glass-ionomer cement, in a glass-plastic composite, in a composite-reinforced glass-ionomer cement and/or in an agent for treating the tooth root, the neck of the tooth and/or the tooth crown and preferably contains fluoride ions.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L84 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2001:50441 HCAPLUS Full-text

DOCUMENT NUMBER:

134:90878

TITLE:

Usage of bioactive glass as preservative for

cosmetic and pharmaceutical

preparations

INVENTOR(S):

Kessler, Susanne; Lee, Sean

PATENT ASSIGNEE(S):

Schott Glas, Germany PCT Int. Appl., 13 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT								APPLICATION NO.									
											WO 2	2000-1	DE22	31		2	0000.	707
	WO	2001																
		W:										, BG,						
												, FI,						
												, KR,						
												, MZ,						
			SD,	SE,	SG,	SI,	SK,	SĻ,	ТJ,	TM,	TR,	, TT,	TZ,	UΑ,	ŪĠ,	US,	UΖ,	VN,
				ZA,				•										
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	, LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR.	, NE,	SN,	TD,	TG			
	CA 2374395					A1		2001	0118		CA 2	2000-	2374	395		2	0000	707
	BR 2000012330					Α		2002	0319		BR 2	2000-	1233	0		2	0000	707
	ΕP	1194	113			A2		2002	0410		EP 2	2000-	9560	75		2	0000	707
												, IT,						
						LV,												
	TR	2001	0372	3		Т2		2002	0621	TR 2001-3723						2	0000	707
	HU	2002	0018	21		A2		2002	1128		HU 2	2002-	1821			2	0000	707
		2003						2003	0204			2001-				_	0000	707
	ΝZ	5161	36			A		2004	0227		NZ :	2000-	5161	36		2	0000	707
		7801						2005	0303		AU 2	2000-	6818	4		2	0000	707
	MX	2001	PA13	165		Α		2002	1104		MX :	2001-	PA13	165		2	0011	218
		2002						2007	1012			2002-					0020	
		2002						2002	0108		NO :	2002-	82			2	0020	108
ZA 2002000155								2004	0211		ZA :	2002-	155			2	0020	108
PRIO	PRIORITY APPLN. INFO.:										1999-							
											WO :	2000-	DE22	31		W 2	0000	707
					_											,		-

The invention relates to a preservative which contains a bio-active glass and AB a protic solvent. The inventive preservative is used preferably for preserving cosmetic and pharmaceutical prepns., in particular for creams, lotions, lipsticks, make-up compns. and/or tinctures. The bioactive glass contains in weight/weight%: SiO2 40-60; CaO 10-30; Na2O 10-35; P2O5 2-8; CaF2 0-10; B2O5 0-8; K2O or MgO 0-5.

L84 ANSWER 7 OF 9 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER:

2007:11615 BIOSIS Full-text

DOCUMENT NUMBER:

PREV200700019207

TITLE:

Use of bioactive glass in dental filling material.

AUTHOR(S):

Anonymous; Kessler, Susanne [Inventor]; Lee,

Sean [Inventor]

CORPORATE SOURCE:

Ergolding, Germany ASSIGNEE: Schott AG

PATENT INFORMATION: US 07090720 20060815

Official Gazette of the United States Patent and Trademark SOURCE:

> Office Patents, (AUG 15 2006) CODEN: OGUPE7. ISSN: 0098-1133.

DOCUMENT TYPE: Patent LANGUAGE: English

ENTRY DATE: Entered STN: 20 Dec 2006

Last Updated on STN: 20 Dec 2006

The dental filling material for a permanent dental filling contains up to 87 AB percent by weight of a mixture of bioactive glass particles capable of forming a hydroxylapatite layer and conventional non-bioactive dental glass particles surrounded or embedded in a matrix material. The glass particles have an average particle size (d(50)) less than 50 mu m. When the index of refraction of the glass particles at least approximately matches the index of refraction of the matrix material a particularly attractive appearance results when the resulting filling material is used to make a dental filling. When the bioactive glass particles contain fluoride, protection against further caries is provided. The invention also includes a method of making the dental filling material, the dental filling made with it and a binder for binding the dental filling to a tooth.

L84 ANSWER 8 OF 9 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:355514 BIOSIS Full-text

DOCUMENT NUMBER:

PREV200300355514

TITLE:

Non-toxic, microbicidal cleaning agent containing bioactive

glass particles.

AUTHOR(S):

Lee, Sean [Inventor, Reprint Author]

CORPORATE SOURCE:

Karlsruhe, Germany

ASSIGNEE: Schott Glas, Mainz, Germany

PATENT INFORMATION: US 6589928 20030708

SOURCE:

Official Gazette of the United States Patent and Trademark

Office Patents, (July 8 2003) Vol. 1272, No. 2. http://www.uspto.gov/web/menu/patdata.html. e-file.

ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE:

LANGUAGE:

Patent

ENTRY DATE:

English

Entered STN: 30 Jul 2003

Last Updated on STN: 30 Jul 2003

A non-toxic cleaning agent with biocidal and dirt-removing properties, which AB is used together with a solvent, contains at least one surface-active agent and phosphorus-containing bioactive glass particles. The glass particles preferably release at least 300 mug of alkali metal ions per gram, have an average size of less than 400 mum and contain SiO2, CaO, Na2 O, CaF2, B2 O3, K2 O and/or MgO, as well as P2 O5. These cleaning agents are particularly well suited for cleaning surfaces and textile materials, for use in dishwashing detergents and particularly in medical and food-serving establishments.

L84 ANSWER 9 OF 9 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER:

1998058669 EMBASE Full-text

TITLE:

Silver(I)-selective membrane electrodes based on mono- to

quadridentate podands.

AUTHOR:

Lee S.S.; Ahn M.-K.; Park S.B.

CORPORATE SOURCE:

S.B. Park, Department of Chemistry, Inje University, Kimhae

621-749, Korea, Republic of

SOURCE:

Analyst, (Feb 1998) Vol. 123, No. 2, pp. 383-386.

Refs: 16

ISSN: 0003-2654 CODEN: ANALAO

COUNTRY:

United Kingdom

DOCUMENT TYPE:

Journal; Article 029

FILE SEGMENT:

Clinical and Experimental Biochemistry 030 Clinical and Experimental Pharmacology

037 Drug Literature Index Pharmacy

039

LANGUAGE:

English

SUMMARY LANGUAGE:

English

ENTRY DATE:

Entered STN: 12 Mar 1998

Last Updated on STN: 12 Mar 1998

A series of nitrogen- and sulfur-containing podands were utilized as sensing AΒ components to prepare Ag(+)-selective polymeric membrane electrodes. The electrochemical properties of these membrane electrodes were studied in a flow injection system and employed for the measurement of 2-thiobarbituric acid with titration.

# Text search history

=> d his L63

```
(FILE 'HCAPLUS' ENTERED AT 13:25:50 ON 07 DEC 2007)
            24 S L56 OR L62
L63
=> d que L63
            48 SEA FILE=REGISTRY ABB=ON PLU=ON O2SI/MF
L1
             1 SEA FILE=REGISTRY ABB=ON PLU=ON "CALCIUM OXIDE"/CN
L2
            12 SEA FILE=REGISTRY ABB=ON PLU=ON CAO/MF
L3
            3 SEA FILE=REGISTRY ABB=ON PLU=ON NA2O/MF
L4
            3 SEA FILE=REGISTRY ABB=ON PLU=ON O5P2/MF
           12 SEA FILE=REGISTRY ABB=ON PLU=ON CAF2/MF
L6
             6 SEA FILE=REGISTRY ABB=ON PLU=ON B2O3/MF
L7
             3 SEA FILE=REGISTRY ABB=ON PLU=ON K2O/MF
L8
            15 SEA FILE=REGISTRY ABB=ON PLU=ON MGO/MF
L9
           158 SEA FILE=REGISTRY ABB=ON PLU=ON NO/MF
L15
             1 SEA FILE=REGISTRY ABB=ON PLU=ON NITRIC OXIDE/CN
L16
             1 SEA FILE=REGISTRY ABB=ON PLU=ON GLASS/CN
L17
         475546 SEA FILE=HCAPLUS ABB=ON PLU=ON L1
L18
         63186 SEA FILE=HCAPLUS ABB=ON PLU=ON L2
L19
          63211 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L20
          22970 SEA FILE=HCAPLUS ABB=ON PLU=ON
L21
         21580 SEA FILE=HCAPLUS ABB=ON PLU=ON L5
L22
          34511 SEA FILE=HCAPLUS ABB=ON PLU=ON L6
L23
         25803 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
L24
         18948 SEA FILE=HCAPLUS ABB=ON PLU=ON L8
L25
         108909 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
L26
         106004 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                               L15
L32
         103683 SEA FILE=HCAPLUS ABB=ON PLU=ON L16
L33
            109 SEA FILE=HCAPLUS ABB=ON PLU=ON L17
L34
             31 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 AND L19 AND L20 AND L21
L35
                AND L22 AND L23 AND L24 AND L25 AND L26
              O SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND L34
L36
             25 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND (BIOACTI? OR GLASS?
L37
                OR VITR?)
          58313 SEA FILE=HCAPLUS ABB=ON PLU=ON NANOPARTICLES/CT
L38
               QUE ABB=ON PLU=ON ((COSMET? OR FACI? OR DERM? OR SKIN?
L39
                 OR MEDICAM? OR MEDICIN?) (3A) (CREAM? OR LOTION? OR MAKE?
                OR COVER? OR LIPSTICK? OR GLOSS? OR EYELIN? OR MASC?))
              O SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND L39
L41
              O SEA FILE=HCAPLUS ABB=ON PLU=ON L34 AND L39
L42
           1033 SEA FILE=HCAPLUS ABB=ON PLU=ON (L32 OR L33) AND (GLASS? OR
L43
                L34 OR L35)
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND L39
L44
             15 SEA FILE=HCAPLUS ABB=ON PLU=ON L43 AND BIOACTIV?
L45
              O SEA FILE=HCAPLUS ABB=ON PLU=ON (L34 OR L35) AND L38
L46
              O SEA FILE=HCAPLUS ABB=ON PLU=ON (L34 OR L35) AND NANOPART?
L47
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 AND (CREAM? OR LOTION? OR
L49
                LIPSTICK? OR MAKE? OR COSMET?)
             49 SEA FILE=HCAPLUS ABB=ON PLU=ON (L35 OR L36 OR L37) OR L41 OR
L50
                L42 OR (L44 OR L45 OR L46 OR L47) OR L49
              3 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 AND L39
L53
              9 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 AND (COSMET? OR LOTION?
L54
                OR LIPSTICK? OR MAKE (2A) UP OR FACIA? OR DERM? OR SKIN?)
             18 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 AND ((NITR?(2A)OXID?) OR
L55
                L32 OR L33)
L56
             24 SEA FILE=HCAPLUS ABB=ON PLU=ON (L53 OR L54 OR L55)
```

L57	55573	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	COSMETICS/CT
L58	204	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L57 AND L38
L59	182495	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	GLASS/CT
L60	319	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L57 AND L59
L61	6	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L58 AND L60
L62	0	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L61 AND ((NITR?(2A)OXID?) OR
		L32	OR L33)			
L63	24	SEA	FILE=HCAPLUS	ABB=ON	PLU=ON	L56 OR L62

#### => d his L80

(FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU' ENTERED AT 13:57:32 ON 07 DEC 2007)

=> d que L80
L72

18 SEA GLASS? AND NANOPART? AND (COSMET? OR LOTION? OR CREAM? OR
LIPSTICK? OR GLOSS? OR LIPGLOSS? OR MAKEUP? OR MAKE(2N) UP OR
DERM? OR FACIA? OR SKIN?)
L73

5814 SEA (NITRIC(2N) OXIDE) AND (COSMET? OR LOTION? OR CREAM? OR

LIPSTICK? OR GLOSS? OR LIPGLOSS? OR MAKEUP? OR MAKE(2N) UP OR DERM? OR FACIA? OR SKIN?)

L74 669 SEA L73 AND (GLASS? OR VITR? OR SILIC?)

L75 2 SEA L74 AND ((NANO? OR MICRO?)(3N)(PARTIC? OR BEAD? OR CAPSU? OR SPHER? OR GRAN? OR GRAIN?))

L76 0 SEA L74 AND ((NITRIC? OR OXIDE?)(3N)(PRESERV? OR STABIL? OR EMULS?))

L77 20 SEA L72 OR L75 OR L76

L78 2 SEA L77 AND (COSMET? OR CREAM? OR LOTION? OR (LIP(2N)(STICK OR GLOSS?)) OR (MAKE(2N)(UP OR OVER)))

L79 7 SEA L77 AND (COSMET? OR PHARMAC? OR THERAP?)

L80 7 SEA L78 OR L79

### => dup rem L63 L80

FILE 'HCAPLUS' ENTERED AT 14:12:53 ON 07 DEC 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'MEDLINE' ENTERED AT 14:12:53 ON 07 DEC 2007

FILE 'BIOSIS' ENTERED AT 14:12:53 ON 07 DEC 2007

Copyright (c) 2007 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 14:12:53 ON 07 DEC 2007

Copyright (c) 2007 Elsevier B.V. All rights reserved.

PROCESSING COMPLETED FOR L63

PROCESSING COMPLETED FOR L80

L85 31 DUP REM L63 L80 (0 DUPLICATES REMOVED)

ANSWERS '1-24' FROM FILE HCAPLUS

ANSWERS '25-26' FROM FILE MEDLINE

ANSWER '27' FROM FILE BIOSIS

ANSWERS '28-31' FROM FILE EMBASE

### Text search results

=> d L85 1-24 ibib ed abs hitind

L85 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2007:1270778 HCAPLUS Full-text

DOCUMENT NUMBER:

147:508630

TITLE:

Microporous ceramic, metallic or glassy

coating on medical devices such as stents for

controlled release of bioactive agent

INVENTOR(S):

Kleiner, Lothar W.; Hossainy, Syed Faiyaz Ahmed; Astafieva, Irina; Pacetti, Stephen D.; Glauser,

Thierry; Desnoyer, Jessica

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 9pp., Cont.-in-part of U.S.

Ser. No. 416,860.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	<b>-</b>			<b></b>
US 2007259101	` A1	20071108	US 2006-447829	20060605
US 2007258903	A1	20071108	US 2006-416860	20060502
PRIORITY APPLN. INFO.:			US 2006-416860 F	2 20060502

ED Entered STN: 08 Nov 2007

AB Microporous ceramic, metallic or glassy coating on a medical device comprising a bioactive agent for controlled release of the agent and methods of making and using the same are provided.

INCL 427022400

CC 63-7 (Pharmaceuticals)

ST ceramic metal glass microporous coating stent implant controlled release

IT Blood vessel

(artificial, anastomotic proliferation; microporous ceramic, metallic or glassy coating on medical devices such as stents for controlled release of bioactive agent)

IT Prosthetic materials and Prosthetics

(bioactive glass; microporous ceramic, metallic or glassy coating on medical devices such as stents for controlled release of bioactive agent)

IT Artery, disease

(carotid, occlusion; microporous ceramic, metallic or glassy coating on medical devices such as stents for controlled release of bioactive agent)

IT Biliary tract, disease

(cholestasis; microporous ceramic, metallic or glassy coating on medical devices such as stents for controlled release of bioactive agent)

IT Movement disorders

(claudication; microporous ceramic, metallic or glassy coating on medical devices such as stents for controlled release of bioactive agent)

IT Drug delivery systems

(implants, stents; microporous ceramic, metallic or glassy coating on medical devices such as stents for controlled release of bioactive agent)

```
IT
    Drug delivery systems
        (microcapsules; microporous ceramic, metallic or glassy
        coating on medical devices such as stents for controlled release of
       bioactive agent)
IT
    Porosity
        (microporosity; microporous ceramic, metallic or glassy
        coating on medical devices such as stents for controlled release of
       bioactive agent)
IT
    Adsorption
    Affinity
    Aneurysm
    Atherosclerosis
     Ceramics
     Chemisorption
     Hemorrhage
     Hydrogen bond
     Ion exchange
     Microporous materials
    Neoplasm
     Pore size distribution
     Pore structure
     Surface roughness
     Thrombosis
     Van der Waals force
     Vascular restenosis
        (microporous ceramic, metallic or glassy coating on medical
        devices such as stents for controlled release of bioactive
        agent)
     Aluminosilicates, biological studies
IT
     Carbides
     Fullerenes
       Glass, biological studies
     Metals, biological studies
     Polymers, biological studies
     Zeolites (synthetic), biological studies
     RL: TEM (Technical or engineered material use); THU (Therapeutic use);
     BIOL (Biological study); USES (Uses)
        (microporous ceramic, metallic or glassy coating on medical
        devices such as stents for controlled release of bioactive
        agent)
IT
     Coating materials
        (microporous; microporous ceramic, metallic or glassy coating
        on medical devices such as stents for controlled release of
        bioactive agent)
     Urethra
ΙT
        (obstruction; microporous ceramic, metallic or glassy coating
        on medical devices such as stents for controlled release of
        bioactive agent)
ΙT
     Drug delivery systems
        (particles; microporous ceramic, metallic or glassy coating
        on medical devices such as stents for controlled release of
        bioactive agent)
TT
     Atherosclerosis
        (plaque; microporous ceramic, metallic or glassy coating on
        medical devices such as stents for controlled release of
        bioactive agent)
     Drug delivery systems
IT
        (prodrugs; microporous ceramic, metallic or glassy coating on
        medical devices such as stents for controlled release of
        bioactive agent)
```

```
IT
    Medical goods
        (stents, drug-eluting; microporous ceramic, metallic or glassy
        coating on medical devices such as stents for controlled release of
       bioactive agent)
     Controlled-release drug delivery systems
IT
        (stents; microporous ceramic, metallic or glassy coating on
       medical devices such as stents for controlled release of
       bioactive agent)
IT
     Coating materials
        (topcoats; microporous ceramic, metallic or glassy coating on
       medical devices such as stents for controlled release of
        bioactive agent)
     7440-44-0, Carbon, biological studies
IT
    RL: TEM (Technical or engineered material use); THU (Therapeutic use);
     BIOL (Biological study); USES (Uses)
        (activated; microporous ceramic, metallic or glassy coating
        on medical devices such as stents for controlled release of
       bioactive agent)
IT
     10102-43-9, Nitric oxide, biological studies
     RL: TEM (Technical or engineered material use); THU (Therapeutic use);
     BIOL (Biological study); USES (Uses)
        (donors; microporous ceramic, metallic or glassy coating on
       medical devices such as stents for controlled release of
       bioactive agent)
     50-02-2, Dexamethasone
                            50-28-2, Estradiol, biological studies
IT
     471-34-1, Calcium carbonate, biological studies
                                                     1306-06-5,
     Hydroxyapatite 1313-96-8, Niobium oxide 1344-28-1, Alumina, biological
              7429-90-5, Aluminum, biological studies 7439-88-5, Iridium,
     studies
                         7439-89-6, Iron, biological studies
     biological studies
                                                               7439-95-4,
     Magnesium, biological studies 7439-96-5, Manganese, biological studies
     7440-03-1, Niobium, biological studies
                                             7440-06-4, Platinum, biological
             7440-22-4, Silver, biological studies
                                                     7440-25-7, Tantalum,
     studies
     biological studies 7440-32-6, Titanium, biological studies
     Chromium, biological studies 7440-57-5, Gold, biological studies
     7440-66-6, Zinc, biological studies
                                         7440-67-7, Zirconium, biological
              7440-70-2, Calcium, biological studies 7631-86-9, Silica,
     biological studies 7758-87-4, Tricalcium phosphate
                                                          7778-18-9, Calcium
              9054-89-1, Super oxide dismutase
                                                 12070-12-1, Tungsten carbide
     12597-68-1, Stainless steel, biological studies 12645-46-4, Iridium
           13463-67-7, Titania, biological studies
                                                     13767-12-9, Octacalcium
     phosphate
                14567-92-1, Brushite 14691-88-4, 4-Amino-2,2,6,6-
     tetramethylpiperidine-1-oxyl
                                   25122-41-2, Clobetasol
                                                            33069-62-4,
     Paclitaxel 53123-88-9, Rapamycin 66524-19-4, Dahllite
                                                                104987-11-3,
     Tacrolimus 114977-28-5, Docetaxel 120685-11-2, Midostaurin
                               159351-69-6, 40-0-(2-Hydroxy)ethylrapamycin
     137071-32-0, Pimecrolimus
     159351-72-1, 40-O-(3-Hydroxy)propylrapamycin 159351-77-6,
     40-O-[2-(2-Hydroxy)ethoxy]ethylrapamycin 220127-57-1, Imatinib mesylate
     221877-54-9, ABT-578 870773-83-4, 40-O-Tetrazole-rapamycin
     RL: TEM (Technical or engineered material use); THU (Therapeutic use);
     BIOL (Biological study); USES (Uses)
        (microporous ceramic, metallic or glassy coating on medical
        devices such as stents for controlled release of bioactive
        agent)
L85 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
                   2007:701126 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        147:102294
                        Medical devices with a polymeric coating comprising
TITLE:
```

Hossainy, Syed Faiyaz Ahmed; Ludwig, Florian Niklas;

nanoparticles

INVENTOR(S):

Sridharan, Srinivasan

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 9pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. KIND DATE PATENT NO. DATE \_\_\_\_\_\_ \_\_\_\_\_\_ ---------20070628 US 2005-317837 US 2007148251 A1 20051222 US 2005-317837 PRIORITY APPLN. INFO.:

Entered STN: 28 Jun 2007

Nanoparticles comprising a matrix or shell material and a bioactive agent and AΒ medical devices, such as a stent containing the nanoparticles are provided. A polymeric coating that includes the nanoparticles is biodegradable or nonbiodegradable and the nanoparticles do not begin to degrade until after released from the coating. The nanoparticles comprising a matrix, a shell, a polymer micelle, a polymerosome or combinations thereof, and a bioactive agent, wherein the matrix or shell is formed of a material selected from ceramic materials, bioglass, metals, polymers, plastic, and combinations thereof. The bioactive agent is selected from paclitaxel, docetaxel, estradiol, nitric oxide donors, superoxide dismutase, tacrolimus, dexamethasone, rapamycin and derivs., clobetasol, pimecrolimus, imatinib mesylate, midostaurin, etc. A method of treating a disorder in a patient comprises implanting the nanoparticles-releasing medical device, wherein the disorder is selected from, for example, atherosclerosis, thrombosis, restenosis, hemorrhage, vascular dissection or perforation, vascular aneurysm, vulnerable plaque, etc.

INCL 424489000; 977906000

63-7 (Pharmaceuticals) CC

Prosthetic materials and Prosthetics IT

> (bioactive glass; medical devices with polymeric coating for release of drug-carrying nanoparticles)

10102-43-9, Nitric oxide, biological studies IT

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(donors; medical devices with polymeric coating for release of drug-carrying nanoparticles)

L85 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2007:412981 HCAPLUS Full-text

DOCUMENT NUMBER:

147:58237

TITLE:

Bergenin as an antioxidant free radical-scavenging

activity from Tinospora crispa

INVENTOR(S):

Maurya, Rakesh; Manahas, Lila Ram; Singh, Surjeet;

Khajuria, Anamika; Bedi, Yashbir Singh; Suri, Om

Parkash; Qazi, Ghulam Nabi

PATENT ASSIGNEE(S):

Council of Scientific and Industrial Research, India

SOURCE: Indian Pat. Appl., 17pp.

CODEN: INXXBQ

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2001DE01109	Α	20070316	IN 2001-DE1109	20011031

PRIORITY APPLN. INFO.:

IN 2001-DE1109

20011031

Entered STN: 13 Apr 2007 ED

This invention relates to a pharmaceutical composition useful as antioxidant AB with free radical-scavenging activity. This invention particularly relates to an antioxidant with free radical-scavenging activity obtained from a new source namely Tinospora cripsa. This invention also relates to a process for the isolation from Tinospora crispa, a new source, with new antioxidant and free radical scavenging activity. Particularly this invention relates to a process of isolation of bioactive agent, a new antioxidant and free radical scavenger from Tinospora crispa, having the formula accompanying this specification, by extracting powdered stems in a polar solvent like rectified spirit, methanol, in glass percolator or in Soxhlet extractor, removing fatty nonpolar constituents by triturating with hexane, dichloromethane, chloroform or Et acetate, to get rich bioactive fraction, on crystallization with polar solvents.

ICM A61K009-00 IC

CC 63-4 (Pharmaceuticals)

IT 10102-43-9, Nitric oxide, biological studies

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (bergenin as an antioxidant free radical-scavenging activity from Tinospora crispa)

L85 ANSWER 4 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN 2007:1284226 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

147:491493

TITLE:

Influence of recovering collagen with

bioactive glass on osteoblast

behavior

AUTHOR (S):

Andrade, Angela Leao; Valerio, Patricia; Miranda de Goes, Alfredo; Leite, Maria de Fatima; Domingues,

Rosana Zacarias

CORPORATE SOURCE:

Department of Chemistry, ICEX, Universidade Federal de

Minas Gerais, Belo Horizonte, CEP 31270-901, Brazil Journal of Biomedical Materials Research, Part B:

Applied Biomaterials (2007), 83B(2), 481-489

CODEN: JBMRGL; ISSN: 1552-4973

PUBLISHER:

SOURCE:

John Wiley & Sons, Inc.

DOCUMENT TYPE:

Journal English

LANGUAGE: Entered STN: 12 Nov 2007 ED

- Bioactive ceramics have interesting properties from the biol. standpoint, but AB their effects on cellular events remain partially unknown. In the current work, we investigated cellular viability, proliferation, and metabolic activity of rat primary osteoblasts in contact with four different samples: type I collagen, bioactive glass -coated collagen (GC), and both samples submitted to immersion for 5 days in a simulated body fluid. The bioactive glass coating was obtained from a sol-gel process. The cell viability, the alkaline phosphate, the collagen secretion, and the nitric oxide production by osteoblast were measured after 72 h of incubation in the presence of the samples. The GC that was immersed for 5 days in a simulated body fluid solution showed an increase in osteoblast viability and proliferation when it was compared with control and the other samples.
- 63-7 (Pharmaceuticals) CC
- ST collagen bioactive glass osteoblast biocompatibility
- IT

(artificial; influence of recovering collagen with bioactive glass on osteoblast behavior)

Prosthetic materials and Prosthetics IT

> (bioactive glass; influence of recovering collagen with bioactive glass on osteoblast behavior)

IT Dental materials and appliances (dentures; influence of recovering collagen with bioactive glass on osteoblast behavior) Prosthetic materials and Prosthetics IT (implants; influence of recovering collagen with bioactive glass on osteoblast behavior) IT Biocompatibility Cell proliferation Osteoblast Sol-gel processing (influence of recovering collagen with bioactive glass on osteoblast behavior) IT Collagens, biological studies RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (type I; influence of recovering collagen with bioactive glass on osteoblast behavior) 1306-06-5, Hydroxyapatite RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (influence of recovering collagen with bioactive glass on osteoblast behavior) 10102-43-9, Nitric oxide, biological studies IT RL: BSU (Biological study, unclassified); FMU (Formation, unclassified); BIOL (Biological study); FORM (Formation, nonpreparative) (influence of recovering collagen with bioactive glass on osteoblast behavior) THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 52 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L85 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2007:433107 HCAPLUS Full-text DOCUMENT NUMBER: 146:507412 In vitro study of dentinal tubule occlusion with TITLE: sol-gel DP-bioglass for treatment of dentin hypersensitivity Lee, Bor-Shiunn; Kang, Shu-Han; Wang, Yin-Lin; Lin, AUTHOR(S): Feng-Huei; Lin, Chun-Pin Graduate Institute of Clinical Dentistry, College of CORPORATE SOURCE: Medicine, National Taiwan University and National Taiwan University Hospital, No. 1, Taipei, 10016, Taiwan Dental Materials Journal (2007), 26(1), 52-61 SOURCE: CODEN: DMJOD5; ISSN: 0287-4547 Japan Society for Dental Materials and Devices PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE: English Entered STN: 19 Apr 2007 ED DP-bioglass paste has been demonstrated to produce 60  $\mu m$  of sealing depth on exposed dentinal tubules. However, the occlusive effect depended on a continuous placement of DP-bioglass paste on dentinal surface for three days. In a bid to fabricate highly reactive DP-bioglass particles, a sol-gel method was used together with HNO3, NaOH, and H3PO4 as catalysts. As a result, the application time of DP-bioglass paste was significantly reduced to 10 min. Percentage of tubular occlusion with DP-bioglass was 53.2-65.4%, while One Coat Bond and Seal & Protect yielded 51.3% and 41.2% resp. Further, the

average depth of tubular occlusion with DP-bioglass was 55.8-62.7 μm, while

One Coat Bond and Seal & Protect produced 40.8  $\mu m$  and 32.5  $\mu m$  resp. In conclusion, the best sealing performance of tubular occlusion was rendered by DP-bioglass catalyzed with HNO3. Its performance was significantly better than Seal & Protect, and was considered to exhibit the greatest potential in treating dentin hypersensitivity.

CC 63-7 (Pharmaceuticals)

IT Prosthetic materials and Prosthetics

(bioactive glass; use of sol-gel DP-bioglass for sealing dentinal tubule occlusion in treatment of dentin hypersensitivity)

IT 1310-73-2, Sodium hydroxide, biological studies 1344-95-2, Calcium silicate 7440-21-3, Silicon, biological studies 7440-23-5, Sodium, biological studies 7440-70-2, Calcium, biological studies 7664-38-2, Phosphoric acid, biological studies 7782-44-7, Oxygen, biological studies 7789-77-7, Dicalcium phosphate dihydrate 10031-30-8 10034-77-2, Dicalcium silicate 10102-43-9, Nitric oxide, biological studies 14265-44-2, Phosphate, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (use of sol-gel DP-bioglass for sealing dentinal tubule occlusion in treatment of dentin hypersensitivity)

REFERENCE COUNT:

THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L85 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:977481 HCAPLUS Full-text

DOCUMENT NUMBER:

145:362865

TITLE:

Cosmetic composition containing nitrogen

monoxide in a microporous crystalline solid material Cals-Grierson, Marie-Madeleine; Blin, Xavier; Jager

Lezer, Nathalie

PATENT ASSIGNEE(S):

L'Oreal, Fr.

SOURCE:

PCT Int. Appl., 71pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

T: ]

PATENT INFORMATION:

PA	PATENT NO.						KIND DATE			APPLICATION NO.						ATE	
WO	2006	0973	52		A1	-	2006	0921	,	WO 2	006-1	EP26	63	<u>-</u>	2	0060	303
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	ΚP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
	MZ, NA, NG,				NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
	SG, SK, SL,				SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,	VC,
	VN, YU, ZA,			ZA,	ZM,	ZW											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NΑ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM										
FR	FR 2883166						2006	0922	2 FR 2005-50664						2	0050	315
FR	FR 2883166						2007	0518		,							
PRIORIT	PRIORITY APPLN. INFO.:									FR 2005-50664					A 2	0050	315
										US 2005-664934P						0050	324

ED Entered STN: 21 Sep 2006

```
The invention relates to an anhydrous cosmetic composition containing nitrogen
AΒ
     monoxide adsorbed into a microporous crystalline solid material. This
     composition may be a makeup or care composition for keratin materials, for
     instance the lips, the eyelashes, the nails or the skin, and may be in the
     form of a stick, especially of lipstick or of lip balm. Zn and Mn zeolites
     were prepared and complexed with NO and compns. such as a lip gloss were
     prepared containing them.
     62-4 (Essential Oils and Cosmetics)
CC
     zeolite nitrogen monoxide prepn cosmetic
ST
     Zeolites (synthetic), biological studies
IT
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (Mn; cosmetic composition containing nitrogen monoxide in a
        microporous crystalline solid material)
IT
     Zeolites (synthetic), biological studies
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (Zn; cosmetic composition containing nitrogen monoxide in a
        microporous crystalline solid material)
     Borosilicate glasses
IT
     RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological
     study); USES (Uses)
        (calcium sodium borosilicate microspheres; cosmetic composition
        containing nitrogen monoxide in a microporous crystalline solid material)
     Glass microspheres
IT
     RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological
     study); USES (Uses)
        (calcium sodium borosilicate; cosmetic composition containing nitrogen
        monoxide in a microporous crystalline solid material)
IT
     Cosmetics
     Dyes
        (cosmetic composition containing nitrogen monoxide in a microporous
        crystalline solid material)
     Aluminosilicates, biological studies
IT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic composition containing nitrogen monoxide in a microporous
        crystalline solid material)
     Fats and Glyceridic oils, biological studies
IT
     Mica-group minerals, biological studies
     Oxides (inorganic), biological studies
     Waxes
     RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological
     study); USES (Uses)
        (cosmetic composition containing nitrogen monoxide in a microporous
        crystalline solid material)
IT
     Cosmetics
        (eye makeups; cosmetic composition containing nitrogen
        monoxide in a microporous crystalline solid material)
IT
        (lipsticks; cosmetic composition containing nitrogen
        monoxide in a microporous crystalline solid material)
IT
     Cosmetics
        (makeups; cosmetic composition containing nitrogen monoxide
        in a microporous crystalline solid material)
IT
     Cosmetics
        (nail lacquers; cosmetic composition containing nitrogen monoxide in a
        microporous crystalline solid material)
     83-08-9D, Quinophthalone, compds.
                                         84-65-1D, Anthraquinone, compds.
IT
     91-22-5D, Quinoline, compds. 92-83-1D, Xanthene, compds.
     Perylene, compds. 480-91-1D, Isoindolinone, compds. 496-12-8D,
```

Isoindoline, compds. 519-73-3D, Triphenylmethane, compds. 522-75-8D, Thioindigo, compds. 574-93-6D, Phthalocyanine, compds. 1047-16-1D, Quinacridone, compds. 1306-38-3, Cerium oxide, biological studies 1314-23-4, Zirconia, biological studies 1332-37-2, Iron oxide, biological studies 1344-28-1, Alumina, biological studies 7429-90-5, Aluminum, biological studies 7440-32-6, Titanium, biological studies 7631-86-9, Silica, biological studies 7787-59-9, Bismuth oxychloride 10101-66-3, Manganese violet 1118-57-3, Chromium oxide 12240-15-2, Ferric blue 13463-67-7, Titania, biological studies 57455-37-5, Ultramarine blue 114482-12-1D, Diketopyrrolopyrrole, compds. 155775-82-9, Calcium aluminum borosilicate RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)

(cosmetic composition containing nitrogen monoxide in a microporous crystalline solid material)

IT 10102-43-9, Nitrogen monoxide, biological studies

RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES (Uses)

(cosmetic composition containing nitrogen monoxide in a microporous crystalline solid material)

REFERENCE COUNT:. 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L85 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:409693 HCAPLUS Full-text

DOCUMENT NUMBER: 144:440167

TITLE: Poly(ester amide) filler blends for modulation of

coating properties

INVENTOR(S): Desnoyer, Jessica Renee; Pacetti, Stephen Dirk;

Hossainy, Syed Faiyaz Ahmed; Kleiner, Lothar; Tang,

Yiwen; Zhang, Gina

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 10 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE		
	<b>-</b>			
US 2006093842	Al	20060504	US 2004-976551	20041029
WO 2006049913	A1	20060511	WO 2005-US38029	20051021
W: AE, AG	, AL, AM, A	T, AU, AZ,	BA, BB, BG, BR, BW,	BY, BZ, CA, CH,
CN, CO	, CR, CU, CZ	Z, DE, DK,	DM, DZ, EC, EE, EG,	ES, FI, GB, GD,
GE, GH	, GM, HR, HU	U, ID, IL,	IN, IS, JP, KE, KG,	KM, KP, KR, KZ,
LC, LK	, LR, LS, LT	T, LU, LV,	LY, MA, MD, MG, MK,	MN, MW, MX, MZ,
NA, NG	, NI, NO, N	Z, OM, PG,	PH, PL, PT, RO, RU,	SC, SD, SE, SG,
SK, SL	, SM, SY, TO	J, TM, TN,	TR, TT, TZ, UA, UG,	US, UZ, VC, VN,
YU, ZA	, ZM, ZW			
RW: AT, BE	, BG, CH, CY	Y, CZ, DE,	DK, EE, ES, FI, FR,	GB, GR, HU, IE,
IS, IT	, LT, LU, LV	V, MC, NL,	PL, PT, RO, SE, SI,	SK, TR, BF, BJ,
CF, CG	, CI, CM, GA	A, GN, GQ,	GW, ML, MR, NE, SN,	TD, TG, BW, GH,
GM, KE	, LS, MW, MZ	IZ, NA, SD,	SL, SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,
KG, KZ	, MD, RU, T	J, TM		
EP 1804849	A1	20070711	EP 2005-817416	20051021
R: AT, BE	, BG, CH, CY	Y, CZ, DE,	DK, EE, ES, FI, FR,	GB, GR, HU, IE,
IS, IT	, LI, LT, L	U, LV, MC,	NL, PL, PT, RO, SE,	SI, SK, TR
PRIORITY APPLN. INF	0.:		US 2004-976551	A 20041029

WO 2005-US38029 W 20051021

ED Entered STN: .05 May 2006

AB Provided herein is a poly(ester amide) (PEA) blend and coatings or implantable devices formed therefrom. The PEA polymer blend is formed of a PEA polymer and a material capable of hydrogen bonding with the PEA. The PEA polymer blend can form a coating on an implantable device, one example of which is a stent. The coating can optionally include a biobeneficial material and/or optionally with a bioactive agent. The implantable device can be used to treat or prevent a disorder such as one of atherosclerosis, thrombosis, restenosis, hemorrhage, vascular dissection or perforation, vascular aneurysm, vulnerable plaque, chronic total occlusion, anastomotic proliferation for vein and artificial grafts, bile duct obstruction, ureter obstruction, tumor obstruction, and combinations thereof. A composition contained 2.0% PEA-TEMPO and EtOH balance. The composition was applied to the surface of a VISION stent.

INCL 428474400; 428480000; 528272000; 528310000

CC 63-7 (Pharmaceuticals)

IT Collagens, biological studies

Dendritic polymers

Elastins Fibrins Fullerenes

Gelatins, biological studies Glass, biological studies

Glycosaminoglycans, biological studies

Laminins

Peptides, biological studies

Phosphate glasses Polyanhydrides

Polycarbonates, biological studies

Polyesters, biological studies

Polyethers, biological studies

Polymer blends

Polyoxyalkylenes, biological studies

Polyphosphazenes

Polyureas

Polyurethanes, biological studies

RL: POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(poly(ester amide) filler blends for modulation of coating properties)

10102-43-9, Nitric oxide, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (donors; poly(ester amide) filler blends for modulation of coating properties)

L85 ANSWER 8 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:317242 HCAPLUS Full-text

DOCUMENT NUMBER:

144:357786

TITLE:

SOURCE:

IT

Poly(ester amide) blend and coatings containing such

for implantable devices

INVENTOR(S):

Desnoyer, Jessica Renee; Pacetti, Stephen Dirk;

Kleiner, Lothar

PATENT ASSIGNEE(S):

Advanced Cardiovascular Systems, Inc., USA

U.S. Pat. Appl. Publ., 9 pp.

\_\_\_\_\_

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

```
US 2004-960381
    US 2006074191
                                20060406
                                                                   20041006
                         A1
    US 7166680
                          B2
                                20070123
                                20060420
                                            WO 2005-US34612
    WO 2006041676
                         A1
                                                                   20050928
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,
             NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
             SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
             YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                                            EP 2005-802167
                                                                   20050928
     EP 1831310
                          A1
                                20070912
             AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
                         A1
                             20070426
                                           US 2006-638298
                                                                   20061212
     US 2007093617
                                                                A 20041006
PRIORITY APPLN. INFO.:
                                            US 2004-960381
                                            WO 2005-US34612
                                                                W 20050928
     Entered STN: 06 Apr 2006
ED
     A poly(ester amide) (PEA) polymer blend having a glass transition temperature
AB
     (Tg) above the Tg of poly(ester amide benzyl ester) (PEA-Bz) or poly{[N,N'-
     sebacoyl-bis-(L-leucine)-1,6-hexylene diester]-[N,N'-sebacoyl-L-lysine
     2,2,6,6-tetramethyl-4-amino-1- piperidinyloxyl amide] } (PEA-TEMPO), comprising:
     a first PEA polymer having a Tg equal to or below the Tg of PEA-Bz or Tg of
     PEA-TEMPO, and a second PEA polymer having a Tg above the Tg of PEA-Bz or Tg
     of PEA-Tempo. The PEA polymer blend can form a coating on an implantable
     device, one example of which is a stent. The coating can optionally include a
     biobeneficial material and/or optionally with a bioactive agent. The
     implantable device can be used to treat or prevent a disorder such as one of
     atherosclerosis, thrombosis, restenosis, hemorrhage, vascular dissection or
     perforation, vascular aneurysm, vulnerable plaque, chronic total occlusion,
     claudication, anastomotic proliferation for vein and artificial grafts, bile
     duct obstruction, ureter obstruction, tumor obstruction, and combinations
     thereof.
INCL 525178000; 525419000
     63-7 (Pharmaceuticals)
     Section cross-reference(s): 42
     10102-43-9, Nitric oxide, biological studies
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (donors; poly(ester amide) blend and coatings containing such for
        implantable devices)
                               THERE ARE 454 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                         454
                               THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
                               FORMAT
L85 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
                         2006:299130 HCAPLUS Full-text
ACCESSION NUMBER:
                         144:338249
DOCUMENT NUMBER:
                         Methacrylate copolymers for medical devices
TITLE:
                         Ding, Ni
INVENTOR(S):
                         USA
PATENT ASSIGNEE(S):
                         U.S. Pat. Appl. Publ., 10 pp.
SOURCE:
                         CODEN: USXXCO
```

Patent English

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT:

LANGUAGE:

#### PATENT INFORMATION:

```
APPLICATION NO.
                                                                  DATE
    PATENT NO.
                        KIND
                               DATE
                               -----
                                           ------
                        ____
     ______
                                                                 20040930
    US 2006067908
                               20060330
                                          US 2004-957265
                         A1
    WO 2006039152
                         A1
                               20060413
                                          WO 2005-US33660
                                                                 20050919
                         A9
                               20070412
    WO 2006039152
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,
            LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,
            NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
            SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
            YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
                            20070704 EP 2005-798762
     EP 1802359
                         A2
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
             BA, HR, MK, YU
                                           US 2004-957265
                                                              A 20040930
PRIORITY APPLN. INFO.:
                                           WO 2005-US33660
                                                               W 20050919
```

ED Entered STN: 31 Mar 2006

AB A polymer of hydrophobic monomers and hydrophilic monomers is provided. It is also provided a polymer blend that contains the polymer and another biocompatible polymer. The polymer or polymer blend and optionally a biobeneficial material and/or a bioactive agent can form a coating on an implantable device such as a drug delivery stent. The implantable device can be used for treating or preventing a disorder such as atherosclerosis, thrombosis, restenosis, hemorrhage, vascular dissection or perforation, vascular aneurysm, vulnerable plaque, chronic total occlusion, anastomotic proliferation for vein and artificial grafts, bile duct obstruction, ureter obstruction, tumor obstruction, or combinations thereof. Stents were coated with poly(Bu methacrylate) (PBMA) primer. The primer coating solution was 2% PBMA in a solvent mixture

INCL 424078270; 424078310

CC 63-7 (Pharmaceuticals)

IT Aneurysm

Atherosclerosis

Cellophane

Coating materials

Glass transition temperature

Hemorrhage

Human

Medical goods

Neoplasm

Thrombosis

(methacrylate copolymers for medical devices)

10102-43-9, Nitric oxide, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (donors; methacrylate copolymers for medical devices)

L85 ANSWER 10 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:318181 HCAPLUS Full-text

DOCUMENT NUMBER:

144:145675

TITLE:

IT

A reagentless biosensor of nitric oxide based on direct electron transfer

process of cytochrome C on multi-walled carbon

nanotube

AUTHOR (S):

CORPORATE SOURCE:

Zhao, Guang-Chao; Yin, Zheng-Zhi; Wei, Xian-Wen School of Chemistry and Materials Science, Anhui Key Laboratory of Functional Molecular Solids, Anhui Normal University, Wuhu, 241000, Peop. Rep. China Frontiers in Bioscience (2005), 10(Suppl.), 2005-2010

SOURCE:

CODEN: FRBIF6; ISSN: 1093-4715

URL: http://www.bioscience.org/asp/getfile.asp?FileNam

e=/2005/v10/af/1675/1675.pdf

PUBLISHER:

Frontiers in Bioscience

DOCUMENT TYPE:

Journal; (online computer file)

LANGUAGE:

English

ED Entered STN: 14 Apr 2005

AB Direct electron transfer between Cytochrome c (Cyt.c) and electrode can be achieved through immobilizing Cyt.c on the surface of multi-walled carbon nanotubes (MWNTs). Under the condition of cyclic potential scans, Cyt.c can be adsorbed on the surface of MWNTs that were modified on a glassy carbon (GC) electrode to form an approx. monolayer. The redox characteristic and bioactivity of Cyt.c could be remained after it was adsorbed on MWNTs' surface. This provides a way to construct a new biosensor based on the activity of Cyt.c. Further investigation displayed that Cyt.c adsorbed on MWNTs showed an enzyme-like activity to catalyze the reduction of nitric oxide (NO). Due to catalyzing by Cyt.c, the reduction of NO in aqueous solution was achieved, which reductive potential appeared at -0.747V (vs.SCE). The peak currents were linearly proportional to concentration of NO in the range from 2 to 48 μmol/l with a limit of detection of 1.3 pM. The biosensor showed a good stability and excellent repeatability.

CC 9-1 (Biochemical Methods)

ST biosensor nitric oxide electron transfer carbon nanotube electrode

IT Nanotubes

(carbon; reagentless biosensor of nitric oxide based on direct electron transfer process of cytochrome C on multi-walled carbon nanotube)

IT Catalysis

(electrocatalysis; reagentless biosensor of nitric oxide based on direct electron transfer process of cytochrome C on multi-walled carbon nanotube)

IT Adsorption

Biosensors

(electrochem.; reagentless biosensor of nitric oxide based on direct electron transfer process of cytochrome C on multi-walled carbon nanotube)

IT Electrodes

(glassy carbon; reagentless biosensor of nitric oxide based on direct electron transfer process of cytochrome C on multi-walled carbon nanotube)

IT Immobilization, molecular or cellular

(protein; reagentless biosensor of nitric oxide based on direct electron transfer process of cytochrome C on multi-walled carbon nanotube)

IT Adsorbed monolayers

Chemically modified electrodes

Cyclic voltammetry Electron transfer

Electronic device fabrication

Reduction, electrochemical

ηц

(reagentless biosensor of nitric oxide based on

direct electron transfer process of cytochrome C on multi-walled carbon nanotube)

IT 7440-44-0, Carbon, analysis

> RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(nanotubes; reagentless biosensor of nitric oxide

based on direct electron transfer process of cytochrome C on multi-walled carbon nanotube)

10102-43-9, Nitric oxide, analysis IT

RL: ANT (Analyte); ANST (Analytical study)

(reagentless biosensor of nitric oxide based on

direct electron transfer process of cytochrome C on multi-walled carbon

9007-43-6, Cytochrome c, biological studies IT

RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); CAT (Catalyst use); DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)

(reagentless biosensor of nitric oxide based on

direct electron transfer process of cytochrome C on multi-walled carbon nanotube)

REFERENCE COUNT:

THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS 34 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L85 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN 2004:698152 HCAPLUS Full-text

ACCESSION NUMBER: DOCUMENT NUMBER:

141:218962

TITLE:

Bioactive material for use in stimulating

vascularization

INVENTOR(S):

Day, Richard Michael

PATENT ASSIGNEE(S):

The North West London Hospitals Nhs Trust, UK

PCT Int. Appl., 72 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	-				KIND DATE			į	APPL:	ICAT:	ION I	. 01		D	ATE		
WC	2004						2004	0826	Ţ	WO 2	004-0	GB57	3		2	0040	213
WC	2004	0715	42		A8		2004	1014									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,
	LK, LR, LS					LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI
	RW: BW, GH, GM				KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,
	BG, CH, CY				CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
							SN,										
EI	1592	462			A1		2005	1109	EP 2004-710917						2	0040	213
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK	
US	•						2006	1019	US 2005-545766						2	0050	815
PRIORIT	RIORITY APPLN. INFO.:								GB 2003-3371					1	A 2	0030	214
										GB 2003-23816					A 2	0031	010
							1	WO 2	004-0	GB57	8	1	√ 2	0040	213		
		CITI 1	2	c													

Entered STN: 26 Aug 2004 ED

AB The present invention relates to a bioactive material, particularly one which comprises SiO2 and CaO and optionally Na2O and/or P2O5, for use in stimulating vascularization and pharmaceutical compns., wound dressings, tissue constructs and delivery systems which include such a bioactive material. ICM A61L015-18 IC ICS A61L015-44; A61L017-00; A61L027-10; A61L027-42; A61L031-12; A61L031-16 CC 1-8 (Pharmacology) Section cross-reference(s): 63, 64 bioactive stimulating vascularization microvascular endothelium ST delivery system bioactive material Prosthetic materials and Prosthetics IT (bioactive glass; bioactive material for use in stimulating vascularization) IT Biocompatibility Cardiovascular agents Cell proliferation Drug delivery systems High throughput screening Human Skin Wound Wound healing Wound healing promoters (bioactive material for use in stimulating vascularization) Angiogenic factors IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (bioactive material for use in stimulating vascularization) Ceramics TT (biocompatible; bioactive material for use in stimulating vascularization) Fibroblast IT (disease; bioactive material for use in stimulating vascularization) Medical goods IT (dressings; bioactive material for use in stimulating vascularization) IT Disease, animal (fibroblast; bioactive material for use in stimulating vascularization) Endothelium IT(microvascular; bioactive material for use in stimulating vascularization) IT (microvessel, endothelium; bioactive material for use in stimulating vascularization) IT Medical goods (sutures, silk; bioactive material for use in stimulating vascularization) IT Silk (sutures; bioactive material for use in stimulating vascularization) 127464-60-2, Vascular endothelial growth factor IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (bioactive material for use in stimulating vascularization) 1303-86-2, Boron oxide (B2O3), biological studies IT1305-78-8, Calcium oxide, biological studies 1309-48-4, Magnesium oxide, biological studies 1313-59-3, Sodium oxide, biological studies 1314-11-0, Strontium oxide (SrO), biological studies 1314-56-3, Phosphorus oxide (P2O5), biological studies

1344-28-1, Aluminum oxide, biological studies 7631-86-9, Silica, biological studies 7789-75-5, Calcium fluoride (CaF2), biological studies 12136-45-7, Potassium oxide, biological studies 13463-67-7, Titanium oxide (TiO2), biological studies 14265-44-2, Phosphate, biological studies 16984-48-8, Fluoride ion, biological studies 20667-12-3, Silver oxide RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(bioactive material for use in stimulating vascularization)

1T 9005-32-7D, Alginic acid, agarose/polylysine complex derivs. 9012-36-6D
Agarose, alginate complex derivs. 25104-18-1D, alginate complex derivs. 26124-68-5, Polyglycolic acid

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)

(bioactive material for use in stimulating vascularization)

L85 ANSWER 12 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:103512 HCAPLUS Full-text

DOCUMENT NUMBER: 141:94237

TITLE: The effect of ionic products from bioactive

glass dissolution on osteoblast proliferation

and collagen production

AUTHOR(S): Valerio, Patricia; Pereira, Marivalda M.; Goes,

Alfredo M.; Leite, M. Fatima

CORPORATE SOURCE: Department of Physiology and Biophysics, Federal

University of Minas Gerais, Minas Gerais, 31270-901,

Brazil

SOURCE: Biomaterials (2004), 25(15), 2941-2948

CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

ED Entered STN: 09 Feb 2004

Bioactive ceramics developed during the past few decades have interesting AB properties from the biol. standpoint, but their effects on cellular events remain partially unknown. In the current work, the authors investigated cellular viability, proliferation, morphol. changes and metabolic activity of rat primary culture osteoblasts in contact with the ionic products from the dissoln. of a bioactive glass with 60% of silica (BG60S) and a biphasic calcium phosphate (BCP). The authors observed that although osteoblasts cultured with BG60S showed vacuole formation, cell viability was increased when compared to BCP and control. The vacuole formation was not due to the presence of high calcium concentration in the ionic products from the dissoln. of BG60S and was not related to nitric oxide production from the osteoblasts. The authors did find that high silicon concentration could induce cellular vacuole formation. Addnl., energy dispersive spectroscopy anal. indicated that vacuole contained 75% more silicon than other regions in the cell outside the vacuole. The authors further found that collagen production was higher in osteoblast cultured in the presence of BG60S compared to BCP and control, while alkaline phosphatase production was similar among cells incubated with BG60S, BCP and control. Together, these results indicate that osteoblast vacuole formation was due to high silicon contents in the dissoln. of BG60S and we can suggest that despite the vacuole formation, there is no significant alteration in the bioceramic cell interaction.

CC 63-7 (Pharmaceuticals)

ST bioactive glass dissoln osteoblast proliferation collagen

IT Prosthetic materials and Prosthetics

(bioactive glass; effect of ionic products from bioactive glass dissoln. on osteoblast proliferation

and collagen production) Prosthetic materials and Prosthetics IT (ceramics; effect of ionic products from bioactive glass dissoln. on osteoblast proliferation and collagen production) IT Cell morphology Dissolution Osteoblast (effect of ionic products from bioactive glass dissoln. on osteoblast proliferation and collagen production) Collagens, biological studies IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (effect of ionic products from bioactive glass dissoln. on osteoblast proliferation and collagen production) 9001-78-9 IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (effect of ionic products from bioactive glass dissoln. on osteoblast proliferation and collagen production) 7440-21-3, Silicon, biological studies 7440-70-2, Calcium, biological IT 7631-86-9, Silica, biological studies 7758-87-4, Biphasic calcium phosphate 14265-44-2, Phosphate, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (effect of ionic products from bioactive glass dissoln. on osteoblast proliferation and collagen production) 10102-43-9, Nitric oxide, biological studies IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (production; effect of ionic products from bioactive glass dissoln. on osteoblast proliferation and collagen production) THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 39 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L85 ANSWER 13 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:61418 HCAPLUS Full-text DOCUMENT NUMBER: 141:76629 TITLE: Osteoblast response to bioactive glasses in vitro correlates with inorganic phosphate content Lossdorfer, S.; Schwartz, Z.; Lohmann, C. H.; AUTHOR (S): Greenspan, D. C.; Ranly, D. M.; Boyan, B. D. University of Bonn, Bonn, Germany CORPORATE SOURCE: Biomaterials (2004), 25(13), 2547-2555 SOURCE: CODEN: BIMADU; ISSN: 0142-9612 Elsevier Science Ltd. PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE: English Entered STN: 26 Jan 2004 EDInorg. phosphate (Pi) is a physiol. regulator of osteoblasts and chondrocytes, AB suggesting that phosphate may contribute to the biol. response of these cells to bioactive glasses like Bioglass 45S5, which is composed of 45% SiO2, 24.5% CaO, 24.5% Na2O, and 6% P2O5. We investigated the effect of varying the Pi content of bioactive glass disks (0%, 3%, 6% and 12% P2O5) using human osteoblast-like MG63 cells as the model. Cell number on 6% Pi disks was comparable to cultures on tissue culture plastic, but was reduced at higher and lower Pi concns. Alkaline phosphatase specific activity of isolated cells and cell layer lysates, as well as PGE2, TGF-β1 and NO levels in conditioned media, were elevated in cultures grown on bioactive glass and varied with the Pi content. The greatest effects were observed in cultures grown on disks with the lowest Pi concns. Thus, growth on the bioactive glasses enhances

CC 63-7 (Pharmaceuticals)

favors osteoblast differentiation.

cell function in comparison with tissue culture plastic and lower Pi content

```
Prosthetic materials and Prosthetics
IT
        (bioactive glass; osteoblast response to
        bioactive glasses in vitro correlates with inorg.
        phosphate content)
IT
    Osteoblast
        (differentiation; osteoblast response to bioactive
        glasses in vitro correlates with inorg. phosphate content)
IT
    Human
    Surface roughness
        (osteoblast response to bioactive glasses in vitro
        correlates with inorg. phosphate content)
    Cell differentiation
IT
        (osteoblast; osteoblast response to bioactive glasses
        in vitro correlates with inorg. phosphate content)
     Transforming growth factors
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (\beta1-; osteoblast response to bioactive glasses
        in vitro correlates with inorg. phosphate content)
                                  9001-78-9, Alkaline phosphatase
     363-24-6, Prostaglandin E2
IT
     10102-43-9, Nitric oxide, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (osteoblast response to bioactive glasses in vitro
        correlates with inorg. phosphate content)
     1305-78-8, Calcium oxide (CaO), biological studies
                                                         1313-59-3, Sodium
IT
     oxide (Na2O), biological studies 1314-56-3, Phosphorus oxide (P2O5),
                        7631-86-9, Silica, biological studies
     biological studies
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
        (osteoblast response to bioactive glasses in vitro
        correlates with inorg. phosphate content)
                               THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         42
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L85 ANSWER 14 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
                         2004:563304 HCAPLUS Full-text
ACCESSION NUMBER:
                         141:212710
DOCUMENT NUMBER:
                         Tailoring of bioactive glasses for
TITLE:
                         the release of nitric oxide as an
                         osteogenic stimulus
                         Pryce, Russell S.; Hench, Larry L.
AUTHOR(S):
                         Centre for Tissue Engineering, Department of
CORPORATE SOURCE:
                         Materials, Imperial College London, London, SW7 2BP,
                         UK
                         Journal of Materials Chemistry (2004), 14(14),
SOURCE:
                         2303-2310
                         CODEN: JMACEP; ISSN: 0959-9428
                         Royal Society of Chemistry
PUBLISHER:
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     Entered STN: 14 Jul 2004
ED
     The production of bioactive glasses using the sol-gel process has increased
AB
     the viability of using such glass-ceramics in the field of biomaterials. The
     mesoporous nature of the sol-gel structure enables the incorporation of
      specific stimuli into the glass for subsequent delivery at the local site upon
      implantation. This incorporation can be achieved by chemical patterning the
      sol-gel matrix with organosilanes that contain specific functional groups.
      This paper examines the synthesis and characterization of a novel sol-gel-
      derived bioactive glass that can generate nitric oxide in an aqueous
      environment. Its synthesis is achieved via a two-step process. The first
```

stage involves surface modification of the ternary 58S bioactive gel-glass (60 mol% SiO2, 36 mol% CaO, 4 mol% P2O5) with an organosilane (3-aminopropyltriethoxysilane). The incorporation of an amino-functional group onto the surface of the gel-glass increases the site reactivity and affinity for nitric oxide. After modification with the organosilane, the bioactive gel-glass is subsequently reacted with mol. nitric oxide resulting in the formation of a nitric oxide-releasing biomaterial. Modification of the gel-glass surface does not alter the reaction mechanisms or bioactivity of the gel-glass, maintaining in-vitro behavior typically associated with bioactive materials that exhibit both osteoconduction and osteoprodn.

CC 63-7 (Pharmaceuticals)

ST bioglass organosilane nitric oxide

IT Prosthetic materials and Prosthetics

(bioactive glass, surface modified; tailoring of

bioactive glasses for release of nitric

oxide as an osteogenic stimulus)

IT Prosthetic materials and Prosthetics

(bioactive glass; tailoring of bioactive glasses for release of nitric oxide as an

osteogenic stimulus)

IT Dissolution

Sol-gel processing

(tailoring of bioactive glasses for release of

nitric oxide as an osteogenic stimulus)

IT 10102-43-9, Nitric oxide, biological studies

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tailoring of bioactive glasses for release of nitric oxide as an osteogenic stimulus)

IT 919-30-2, 3-Aminopropyltriethoxysilane

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(tailoring of bioactive glasses for release of

nitric oxide as an osteogenic stimulus)

1305-78-8, Calcium oxide (CaO), biological studies 1314-56-3, Phosphorus oxide (P2O5), biological studies 7631-86-9, Silica, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tailoring of bioactive glasses for release of

nitric oxide as an osteogenic stimulus)

REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L85 ANSWER 15 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:261718 HCAPLUS Full-text

DOCUMENT NUMBER:

138:276362

TITLE:

Coated implantable medical device

INVENTOR(S):

Ragheb, Anthony O.; Bates, Brian L.; Stewart, Joseph

M., IV; Bourdeau, William J.; Choules, Brian D.;

Purdy, James D.; Fearnot, Neal E.

PATENT ASSIGNEE(S):

Cook Incorporated, USA; Med Institute, Inc.

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003026718	A1	20030403	WO 2001-US45577	20011031

```
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
            VN, YU, ZA, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,
            KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
            IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
            GQ, GW, ML, MR, NE, SN, TD, TG
                                           US 2001-659
                                20020725
                                                                   20011031
    US 2002098278
                         A1
    US 6918927
                         B2
                                20050719
                                            CA 2001-2425665
                                20030403
                                                                   20011031
    CA 2425665
                         A1
                                            AU 2002-239436
                                                                   20011031
    AU 2002239436
                         A1
                                20030407
    AU 2002239436
                         B2
                                20070426
                                            EP 2001-987197
                                                                   20011031
    EP 1330273
                         A1
                                20030730
    EP 1330273
                         В1
                                20070725
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                          Т
                                20040729
                                            JP 2003-530350
                                                                   20011031
     JP 2004522559
                                                                   20011031
    AT 367836
                          Т
                                20070815
                                            AT 2001-987197
    HK 1053270
                          A1
                                20070914
                                            HK 2003-105622
                                                                   20030805
                          A1
                                20051215
                                            US 2005-141574
                                                                   20050531
    US 2005278021
                                                                P 20001031
                                            US 2000-244446P
PRIORITY APPLN. INFO.:
                                            US 2001-659
                                                                A2 20011031
                                            WO 2001-US45577
                                                                W 20011031
                                            US 2002-395434P
                                                                P 20020712
                                            US 2003-618977
                                                             A1 20030714
```

ED Entered STN: 04 Apr 2003

A medical device includes a structure adapted for introduction into a patient, AB the structure being formed of a preferably non-porous base material having a roughened or textured surface. The structure is conveniently configured as a vascular stent with a base material of stainless steel, nitinol or another suitable material. The medical device also includes a layer of a bioactive material posited directly upon the roughened or textured surface of the base material of the structure. The surface of the base material is roughened or textured by etching or by abrasion with sodium bicarbonate or another suitable grit. A preferred roughened or textured surface is thought to have a mean surface roughness of about 10 in. (about 250 nm) and a surface roughness range between about 1/in. and about 100 in. (about 25 nm and about 2.5 m). The particularly preferred use of sodium bicarbonate as the abrasive to provide roughness or texture to the surface of the base material of the structure is addnl. advantageous in the low toxicity of the sodium bicarbonate to production workers, the ease of product and waste cleanup, and the biocompatibility of any residual sodium bicarbonate.

IC ICM A61L031-16

ICS A61L027-54

CC 63-7 (Pharmaceuticals)

IT Glass, processes

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)

(coated implantable medical device)

50-02-2, Dexamethasone 50-78-2, Aspirin 50-81-7, Ascorbic acid, IT 57-92-1, biological studies 51-61-6, Dopamine, biological studies 59-02-9,  $\alpha$ -Tocopherol 59-05-2, Streptomycin, biological studies 64-86-8, Colchicine 70-51-9, Deferoxamine 114-07-8, Methotrexate 1404-90-6, Vancomycin 1177-87-3, Dexamethasone acetate Erythromycin 2392-39-4, Dexamethasone sodium phosphate 7439-89-6D, Iron, chelates 7440-44-0, Carbon, biological studies 7553-56-2D, Iodine, Barium 8001-27-2, Hirudin 9002-01-1, 7553-56-2D, Iodine, compds.

9002-84-0, PTFE 9002-88-4, Polyethylene Streptokinase 9004-35-7, Cellulose acetate 9004-70-0, Cellulose Polypropylene 9005-49-6, Heparin, biological studies 9039-53-6, Urokinase 9054-89-1, Superoxide dismutase 10098-91-6, Y-90, biological studies 10102-43-9, Nitric oxide, biological studies 10198-40-0, Cobalt-60, biological studies 12683-48-6 14133-76-7, Tc-99, biological studies 14596-37-3, P-32, biological studies 14694-69-0, Ir-192, biological studies 15750-15-9, In-111, biological 22260-51-1, Bromocriptine mesylate 24980-41-4, Polycaprolactone 25038-59-9, PET, biological studies 25248-42-4, 26009-03-0, Polyglycolic acid 26023-30-3, Polycaprolactone 26100-51-6, Polylactic acid Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26124-68-5, Polyglycolic acid 33069-62-4, Paclitaxel Glycolic acid-lactic acid copolymer 35121-78-9, Prostacyclin 37187-49-8, Cytochalasin 53123-88-9, Rapamycin 55142-85-3, Ticlopidine 62571-86-2, Captopril 66104-23-2, Pergolide mesylate 71142-71-7 74863-84-6, Argatroban 75847-73-3, Enalapril 79217-60-0, Cyclosporin 127464-60-2, Vascular endothelial growth factor 108736-35-2, Angiopeptin 128171-16-4, Hydroxybutyric acid-hydroxyvaleric acid copolymer 128270-60-0, Hirulog 139639-23-9, Tissue plasminogen activator RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (coated implantable medical device)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L85 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:173544 HCAPLUS Full-text

DOCUMENT NUMBER:

138:191877

TITLE:

Antimicrobial powdered silicate glass and

use thereof

INVENTOR(S):

Fechner, Joerg Hinrich; Zimmer, Jose

PATENT ASSIGNEE(S): Schott Glas, Germany; Carl-Zeiss-Stiftung

SOURCE:

PCT Int. Appl., 15 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

NO.			KINI	)	DATE		ī	APPL:	ICAT:	I NOI	NO.		Dž	ATE	
01949	10		A2	-	2003	306	,	νO 2	002-1	EP921	16		2.0	00208	 B17
	-								002	J. J.					
	-				AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW							
GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ΒJ,	CF,
CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
3630			A1		2003	0313	]	DE 2	002-	1021	3630		2	0020	327
LN. I	NFO.	. :					1	DE 2	001-	1014	1116	7	A 2	0010	822
							1	DE 2	002-	1021	3630	7	A 2	0020	327
- 3 3	301849 AE, CO, GM, LS, PL, UA, GH, KG, FI, CG,	AE, AG, CO, CR, GM, HR, LS, LT, PL, PT, UA, UG, GH, GM, KG, KZ, FI, FR, CG, CI,	3018499 AE, AG, AL, CO, CR, CU, GM, HR, HU, LS, LT, LU, PL, PT, RO, UA, UG, US, GH, GM, KE, KG, KZ, MD, FI, FR, GB, CG, CI, CM,	3018499 A2 3018499 A3 AE, AG, AL, AM, CO, CR, CU, CZ, GM, HR, HU, ID, LS, LT, LU, LV, PL, PT, RO, RU, UA, UG, US, UZ, GH, GM, KE, LS, KG, KZ, MD, RU, FI, FR, GB, GR, CG, CI, CM, GA,	3018499 A2 3018499 A3 AE, AG, AL, AM, AT, CO, CR, CU, CZ, DE, GM, HR, HU, ID, IL, LS, LT, LU, LV, MA, PL, PT, RO, RU, SD, UA, UG, US, UZ, VN, GH, GM, KE, LS, MW, KG, KZ, MD, RU, TJ, FI, FR, GB, GR, IE, CG, CI, CM, GA, GN,	3018499 A2 20036 AE, AG, AL, AM, AT, AU, CO, CR, CU, CZ, DE, DK, GM, HR, HU, ID, IL, IN, LS, LT, LU, LV, MA, MD, PL, PT, RO, RU, SD, SE, UA, UG, US, UZ, VN, YU, GH, GM, KE, LS, MW, MZ, KG, KZ, MD, RU, TJ, TM, FI, FR, GB, GR, IE, IT, CG, CI, CM, GA, GN, GQ,	3018499 A2 20030306 3018499 A3 20030417 AE, AG, AL, AM, AT, AU, AZ, CO, CR, CU, CZ, DE, DK, DM, GM, HR, HU, ID, IL, IN, IS, LS, LT, LU, LV, MA, MD, MG, PL, PT, RO, RU, SD, SE, SG, UA, UG, US, UZ, VN, YU, ZA, GH, GM, KE, LS, MW, MZ, SD, KG, KZ, MD, RU, TJ, TM, AT, FI, FR, GB, GR, IE, IT, LU, CG, CI, CM, GA, GN, GQ, GW, 13630 A1 20030313	3018499 A2 20030306 N 3018499 A3 20030417 AE, AG, AL, AM, AT, AU, AZ, BA, CO, CR, CU, CZ, DE, DK, DM, DZ, GM, HR, HU, ID, IL, IN, IS, JP, LS, LT, LU, LV, MA, MD, MG, MK, PL, PT, RO, RU, SD, SE, SG, SI, UA, UG, US, UZ, VN, YU, ZA, ZM, EGH, GM, KE, LS, MW, MZ, SD, SL, KG, KZ, MD, RU, TJ, TM, AT, BE, FI, FR, GB, GR, IE, IT, LU, MC, CG, CI, CM, GA, GN, GQ, GW, ML, 13630 A1 20030313	3018499 A2 20030306 WO 203018499 A3 20030417  AE, AG, AL, AM, AT, AU, AZ, BA, BB, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, GM, HR, HU, ID, IL, IN, IS, JP, KE, LS, LT, LU, LV, MA, MD, MG, MK, MN, PL, PT, RO, RU, SD, SE, SG, SI, SK, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW GH, GM, KE, LS, MW, MZ, SD, SL, SZ, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, FI, FR, GB, GR, IE, IT, LU, MC, NL, CG, CI, CM, GA, GN, GQ, GW, ML, MR, 13630 A1 20030313 DE 20 DE 200000000000000000000000000000	A2 20030306 WO 2002-1 B018499 A3 20030417 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, 13630 A1 20030313 DE 2002-1	A2 20030306 WO 2002-EP923 A3 20030417 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, L3630 A1 20030313 DE 2002-10213	A2 20030306 WO 2002-EP9216 B018499 A3 20030417 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, A13630 A1 20030313 DE 2002-10213630 PLN. INFO:: DE 2001-10141116	3018499  A2 20030306  WO 2002-EP9216  B018499  A3 20030417  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, 13630  PLN. INFO::  DE 2001-10141116	3018499 A2 20030306 WO 2002-EP9216 20 3018499 A3 20030417  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  BEACH TO THE STANDARD SERVING SERVI	3018499 A2 20030306 WO 2002-EP9216 200208 3018499 A3 20030417  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW  GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  13630 A1 20030313 DE 2002-10213630 200205  PLN. INFO:: DE 2001-10141116 A 200105

ED Entered STN: 07 Mar 2003

AB The glass powder contains SiO2 20-80, Na2O 0-40, K2O 0-40, Li2O 0-40, CaO 0-40, MgO 0-40, Al2O3 0-40, P2O5 0-1, B2O3 0-40, Fe2O3 0-10, and XFy 0-30 weight% (X = Li, Na, K, Be, Mg, Ca; y = 1, 2), and trace elements and/or

```
refining agents; whereby Na2O + K2O + Li2O + CaO + MgO 15-80 weight%. A
     calcium sodium silicate glass showed very good antimicrobial activity against
     E. coli, P. aeruginosa, S. aureus, C. albicans and A. niger after 14 days.
     ICM C03C013-00
IC
     57-1 (Ceramics)
CC
     Section cross-reference(s): 5, 17, 38, 62
ST
     calcium sodium silicate glass powder antimicrobial agent
IT
     Antimicrobial agents
        (antimicrobial powdered silicate glass and use thereof)
IT
     Cosmetics
     Deodorants
     Food
     Medical goods
     Scouring agents
        (antimicrobial powdered silicate glass and use thereof in)
IT
     Plastics, uses
     Polymers, uses
     RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (antimicrobial powdered silicate glass and use thereof in)
IT
     Silicate glasses
     RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); TEM
     (Technical or engineered material use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (calcium sodium silicate; antimicrobial powdered silicate glass
        and use thereof)
IT
     Medical goods
        (hygienic materials, paper hygienic materials; antimicrobial powdered
        silicate glass and use thereof in)
     1309-37-1, Iron oxide, uses
IT
     RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (antimicrobial powdered silicate glass and use thereof)
     7440-22-4, Silver, uses 7440-50-8, Copper, uses
IT
                                                        7440-66-6, Zinc, uses
     7681-49-4, Sodium fluoride, uses 7783-40-6, Magnesium fluoride
     7787-49-7, Beryllium fluoride 7789-23-3, Potassium fluoride
     Lithium fluoride, uses 7789-75-5, Calcium fluoride, uses
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     TEM (Technical or engineered material use); BIOL (Biological study); USES
        (calcium sodium silicate glass; antimicrobial powdered silicate
        glass and use thereof)
IT
     1303-86-2, Boron oxide, uses 1305-78-8, Calcia, uses
     1309-48-4, Magnesia, uses 1313-59-3, Sodium oxide, uses
     1314-56-3, Phosphorus pentaoxide, uses
                                             1344-28-1, Alumina, uses
     7631-86-9, Silica, uses
                              12057-24-8, Lithium oxide, uses
     12136-45-7, Potassium oxide, uses
     RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (calcium sodium silicate glass; antimicrobial powdered silicate
        glass and use thereof)
L85 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
                         2003:173543 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         138:191876
                         Antimicrobial, anti-inflammatory, wound-healing and
TITLE:
                         disinfecting silicate glass and use thereof
                         Fechner, Joerg Hinrich; Zimmer, Jose
INVENTOR(S):
                         Schott Glas, Germany; Carl-Zeiss-Stiftung
PATENT ASSIGNEE(S):
SOURCE:
                         PCT Int. Appl., 19 pp.
```

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

Ger

PATENT INFORMATION:

PATENT NO. APPLICATION NO. KIND DATE DATE ------------------------WO 2003018498 20030306 WO 2002-EP9217 A1 20020817 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20030528 DE 2001-10156577 20011120 DE 10156577 A1 20030313 DE 2002-10213630 20020327 DE 10213630 A1 20050324 US 2004-487186 20040624 A1 US 2005064193 US 7166549 B2 20070123 PRIORITY APPLN. INFO.: DE 2001-10141116 A 20010822 DE 2001-10156577 A 20011120 A 20020327 DE 2002-10213630 W 20020817 WO 2002-EP9217

ED Entered STN: 07 Mar 2003

- AB The glass contains SiO2 30-95, Na2O 0-40, K2O 0-40, Li2O 0-40, CaO 0-35, MgO 0-10, Al2O3 0-10, P2O5 0-15, B2O3 1-5, NaF 0-10, LiF 0-10, KF 0-10, CaF2 0-10, Ag2O 0-5, MgF2 0-10, Fe2O3 0-2, and XIy 0-10 weight% (X = Li, Na, K, Rb, Cs, Be, Mg, Ca, Sr, Ba, Ag, Zn; y = 1, 2); whereby the sequence of XIy >10 ppm. A calcium sodium silicate glass showed very good antibacterial activity against E. coli, P. aeruginosa, S. aureus, C. albicans and A. niger.
- IC ICM C03C012-00
  - ICS C03C004-00; C03C003-11; C03C003-062
- CC 57-1 (Ceramics)
  - Section cross-reference(s): 5, 17, 38, 62, 63
- ST calcium sodium silicate glass antimicrobial agent; anti inflammatory agent calcium sodium silicate glass; wound healing treatment calcium sodium silicate glass; disinfectant sodium silicate glass
- IT Disinfectants

(antimicrobial, anti-inflammatory, wound-healing and disinfecting silicate glass and use thereof)

IT Anti-inflammatory agents

Antimicrobial agents

Food preservatives

(antimicrobial, anti-inflammatory, wound-healing and disinfecting silicate glass and use thereof as)

IT Food

(antimicrobial, anti-inflammatory, wound-healing and disinfecting silicate glass and use thereof for)

IT Antiperspirants

Cosmetics

Dental materials and appliances

Deodorants

Lacquers

Medical goods

Paints

Scouring agents

```
(antimicrobial, anti-inflammatory, wound-healing and disinfecting
        silicate glass and use thereof in)
ΙT
    Plastics, uses
    Polymers, uses
    RL: BUU (Biological use, unclassified); TEM (Technical or engineered
    material use); BIOL (Biological study); USES (Uses)
        (antimicrobial, anti-inflammatory, wound-healing and disinfecting
        silicate glass and use thereof in)
    Dentifrices
IT
        (antiperiodontal; antimicrobial, anti-inflammatory, wound-healing and
        disinfecting silicate glass and use thereof for)
    Silicate glasses
IT
     RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); TEM
     (Technical or engineered material use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (calcium sodium silicate; antimicrobial, anti-inflammatory,
        wound-healing and disinfecting silicate glass and use
        thereof)
    Medical goods
IT
        (hygienic materials, paper hygienic materials; antimicrobial,
        anti-inflammatory, wound-healing and disinfecting silicate
        glass and use thereof in)
IT
    Wound healing
        (treatment; antimicrobial, anti-inflammatory, wound-healing and
        disinfecting silicate glass and use thereof for)
     1309-37-1, Iron oxide, uses 7681-11-0, Potassium iodide, uses
TT
     7681-49-4, Sodium fluoride, uses
                                       7681-82-5, Sodium iodide, uses
     7783-40-6, Magnesium fluoride 7783-96-2, Silver iodide
     Beryllium iodide 7789-17-5, Cesium iodide 7789-23-3, Potassium
     fluoride 7789-24-4, Lithium fluoride, uses 7789-75-5, Calcium
                                                 10102-68-8, Calcium iodide
     fluoride, uses 7790-29-6, Rubidium iodide
                             10377-51-2, Lithium iodide 10377-58-9,
     10139-47-6, Zinc iodide
                      10476-86-5, Strontium iodide 13718-50-8, Barium
     Magnesium iodide
              20667-12-3, Silver oxide
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     TEM (Technical or engineered material use); BIOL (Biological study); USES
        (calcium sodium silicate glass; antimicrobial,
        anti-inflammatory, wound-healing and disinfecting silicate
        glass and use thereof)
     1303-86-2, Boron oxide, uses 1305-78-8, Calcia, uses
     1309-48-4, Magnesia, uses 1313-59-3, Sodium oxide, uses
     1314-56-3, Phosphorus pentaoxide, uses
                                            1344-28-1, Alumina, uses
     7631-86-9, Silica, uses
                             12057-24-8, Lithium oxide, uses
     12136-45-7, Potassium oxide, uses
     RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (calcium sodium silicate glass; antimicrobial,
        anti-inflammatory, wound-healing and disinfecting silicate
        glass and use thereof)
                               THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         4
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L85 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
                         2003:173541 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        138:191875
                        Antimicrobial, anti-inflammatory, wound-healing
TITLE:
                        silicate glass powder and use thereof
                        Fechner, Joerg Hinrich; Zimmer, Jose
INVENTOR(S):
```

PATENT ASSIGNEE(S):

Schott Glas, Germany; Carl-Zeiss-Stiftung

SOURCE:

PCT Int. Appl., 24 pp.

DOCUMENT TYPE:

Patent

CODEN: PIXXD2

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

3

PATENT INFORMATION:

DATE APPLICATION NO. DATE PATENT NO. KIND \_\_\_\_\_ ---------\_\_\_\_\_\_ WO 2002-EP9220 20020817 20030306 WO 2003018496 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG A1 20030528 DE 2001-10156577 20011120 DE 10156577 20030313 DE 2002-10213630 20020327 A1 DE 10213630 DE 2002-10213632 20020327 20030313 DE 10213632 Al EP 2002-772168 20020817 20040519 EP 1419118 A1 20060712 EP 1419118 В1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK 20020817 20050113 JP 2003-523165 Т JP 2005501113 20020817 AT 2002-772168 20060815 AT 332879 Т 20040324 A1 20041216 US 2004-487187 US 2004253321 DE 2001-10141116 A 20010822 PRIORITY APPLN. INFO.: A 20011120 DE 2001-10156577 A 20020327 DE 2002-10213630 A 20020327 DE 2002-10213632 WO 2002-EP9220 W 20020817

ED Entered STN: 07 Mar 2003

The glass powder contains SiO2 20-80, Na2O 0-40, K2O 0-40, Li2O 0-40, CaO 0-40, MgO 0-40, Al2O3 0-40, P2O5 0-1, B2O3 0-40, ZnO 0-10 weight%, and trace elements and/or refining agents; whereby Na2O + K2O + Li2O + CaO + MgO 15-80 weight%. A calcium sodium silicate glass showed very good antimicrobial activity against E. coli, P. aeruginosa, S. aureus, C. albicans, and A. niger after 14 days.

IC ICM C03C003-076

ICS C03C003-095; C03C012-00; C03C004-00; C03C003-11; C03C003-062

CC 57-1 (Ceramics)

Section cross-reference(s): 5, 38, 62, 63

ST calcium sodium silicate glass powder antimicrobial agent; anti inflammatory agent calcium sodium silicate glass powder; wound healing treatment calcium sodium silicate glass powder

IT. Anti-inflammatory agents

Antimicrobial agents

(antimicrobial, anti-inflammatory, wound-healing silicate glass powder and use thereof as)

IT Antiperspirants

Cosmetics

Deodorants

Food

Lacquers

Medical goods

```
Paints
     Scouring agents
        (antimicrobial, anti-inflammatory, wound-healing silicate glass
        powder and use thereof in)
     Plastics, uses
IT
    Polymers, uses
    RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (antimicrobial, anti-inflammatory, wound-healing silicate glass
        powder and use thereof in)
IT
     Silicate glasses
     RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); TEM
     (Technical or engineered material use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (calcium sodium silicate; antimicrobial, anti-inflammatory,
        wound-healing silicate glass powder and use thereof)
IT
     Medical goods
        (hygienic materials, paper hygienic materials; antimicrobial,
        anti-inflammatory, wound-healing silicate glass powder and
        use thereof for)
     Skin, disease
IT
        (irritation, treatment; antimicrobial, anti-inflammatory, wound-healing
        silicate glass powder and use thereof for)
IT
     Wound healing
        (treatment; antimicrobial, anti-inflammatory, wound-healing silicate
        glass powder and use thereof for)
                                                                7681-49-4,
                             7681-11-0, Potassium iodide, uses
     7440-66-6, Zinc, uses
IT
                             7681-82-5, Sodium iodide, uses 7783-40-6,
     Sodium fluoride, uses
     Magnesium fluoride 7787-49-7, Beryllium fluoride 7787-53-3, Beryllium
                                              7789-24-4, Lithium fluoride, uses
              7789-23-3, Potassium fluoride
                                        10102-68-8, Calcium iodide
     7789-75-5, Calcium fluoride, uses
     10377-51-2, Lithium iodide 10377-58-9, Magnesium iodide
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     TEM (Technical or engineered material use); BIOL (Biological study); USES
     (Uses)
        (calcium sodium silicate glass; antimicrobial,
        anti-inflammatory, wound-healing silicate glass and use
        thereof)
     12057-24-8, Lithium oxide, uses
IT
     RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (calcium sodium silicate glass; antimicrobial,
        anti-inflammatory, wound-healing silicate glass and use
        thereof)
     7440-22-4, Silver, uses 7440-50-8, Copper, uses
IT
     RL: BUU (Biological use, unclassified); MOA (Modifier or additive use);
     TEM (Technical or engineered material use); BIOL (Biological study); USES
     (Uses)
        (calcium sodium silicate glass; antimicrobial,
        anti-inflammatory, wound-healing silicate glass powder and
        use thereof)
     1303-86-2, Boron oxide, uses 1305-78-8, Calcia, uses
IT
     1309-48-4, Magnesia, uses 1313-59-3, Sodium oxide, uses
     1314-13-2, Zinc oxide, uses 1314-56-3, Phosphorus pentaoxide,
            1344-28-1, Alumina, uses 7631-86-9, Silica, uses
     12136-45-7, Potassium oxide, uses
     RL: BUU (Biological use, unclassified); TEM (Technical or engineered
     material use); BIOL (Biological study); USES (Uses)
        (calcium sodium silicate glass; antimicrobial,
        anti-inflammatory, wound-healing silicate glass powder and
```

use thereof)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L85 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:76560 HCAPLUS Full-text

DOCUMENT NUMBER: 138:112050

TITLE: Foaming cosmetic preparations comprising a

lipid phase

INVENTOR(S): Riedel, Heidi; Kroepke, Rainer; Bleckmann, Andreas;

Oelrichs, Ilka

PATENT ASSIGNEE(S): Beiersdorf Ag, Germany

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2003007894	A2 20030130	WO 2002-EP7908	20020716
WO 2003007894	A3 20030501		•
W: JP, US			
RW: AT, BE, BG,	CH, CY, CZ, DE,	DK, EE, ES, FI, FR, GB,	GR, IE, IT,
LU, MC, NL,	PT, SE, SK, TR	•	
DE 10134729	A1 20030206	DE 2001-10134729	20010717
EP 1411883	A2 20040428	EP 2002-760246	20020716
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	, SE, MC, PT,
IE, FI, CY,	TR, BG, CZ, EE,	SK	
US 2004202618	A1 20041014	US 2004-760088	20040116
PRIORITY APPLN. INFO.:		DE 2001-10134729	A 20010717
		WO 2002-EP7908	W 20020716

ED Entered STN: 31 Jan 2003

The invention relates to foamable cosmetic or dermatol . prepns. comprising AB (I) an emulsifier system consisting of at least one emulsifier (A) selected from the group of fully, partially or non neutralized, branched and/or unbranched, saturated and/or unsatd. fatty acids with a chain length of 10-40 carbon atoms, (B) at least one emulsifier (B), selected from the group of polyethoxylated fatty acid esters with a chain length of 10-40 carbon atoms and with a degree of ethoxylation of 5 -100 and (C) at least one co-emulsifer C, selected from the group of saturated and/or unsatd., branched and/or unbranched fatty alcs. with a chain length of 10-40 carbon atoms, and (II) up to 50 weight %- in relation to the entire weight of the foamable preparationof a lipid phase which contains one or several non-polar lipids with a polarity of at least 30 mN/m. The compns. are filled in a pressure container and dosed with gas. Thus a foamy O/W cream contained in the emulsion (weight/weight)%: stearic acid 3.00; cetyl alc. 8.50; PEG-20 stearate 8.50; C12-C15 alkyl benzoate 4.00; paraffin oil 5.00; isohexadecane 2.00; glycerin 5.00; sodium hydroxide q.s.; preservative q.s.; perfume q.s.; water to 100; pH 6.5-7.5. A foam was prepared by using 90 volume/volume% of the emulsion and 10 volume/volume% propane-butane mixture

- IC ICM A61K007-00
- CC 62-4 (Essential Oils and Cosmetics)
- Section cross-reference(s): 63
- ST emulsion foam cosmetics lipid
- IT Alcohols, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (C16-18; foaming cosmetic prepns. comprising a lipid phase)

IT Glycerides, biological studies

```
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C8-10; foaming cosmetic prepns. comprising a lipid phase)
IT
    Cosmetics
        (creams; foaming cosmetic prepns. comprising a
        lipid phase)
IT
     Cyclosiloxanes
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me; foaming cosmetic prepns. comprising a lipid phase)
     Polyoxyalkylenes, biological studies
IT
     Polyoxyalkylenes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (ester with stearic acid; foaming cosmetic prepns. comprising
        a lipid phase)
     Polyoxyalkylenes, biological studies
IT
     Polyoxyalkylenes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (esters with fatty acids; foaming cosmetic prepns. comprising
        a lipid phase)
ΙT
     Alcohols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (fatty; foaming cosmetic prepns. comprising a lipid phase)
TΤ
     Air
     Containers
     Emulsifying agents
     Emulsions
     Polarity
     Propellants (sprays and foams)
     Sunscreens
        (foaming cosmetic prepns. comprising a lipid phase)
     Fatty acids, biological studies
ΙT
     Hydrocarbon oils
     Lipids, biological studies
     Paraffin oils
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (foaming cosmetic prepns. comprising a lipid phase)
IT
     Glass, biological studies
     Metals, biological studies
     Plastics, biological studies
     RL: COS (Cosmetic use); DEV (Device component use); BIOL (Biological
     study); USES (Uses)
        (foaming cosmetic prepns. comprising a lipid phase)
IT
     Cosmetics
        (foams; foaming cosmetic prepns. comprising a lipid phase)
IT
     Hydrocarbons, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (halo; foaming cosmetic prepns. comprising a lipid phase)
IT
     Cosmetics
        (lotions; foaming cosmetic prepns. comprising a
        lipid phase)
IT
     Cosmetics
        (moisturizers; foaming cosmetic prepns. comprising a lipid
        phase)
IT
     Emulsions
        (oil-in-water; foaming cosmetic prepns. comprising a lipid
        phase)
IT
     Drug delivery systems
        (ointments, creams; foaming cosmetic prepns.
        comprising a lipid phase)
     50-21-5D, C12-C15 alkyl ester 57-10-3, Palmitic acid, biological studies
IT
     57-11-4, Stearic acid, biological studies 57-11-4D, Stearic acid, ester
```

74-98-6, Propane, biological studies 106-97-8, Butane, 112-72-1, Myristyl alcohol 115-10-6, Dimethyl ether biological studies 124-38-9, Carbon dioxide, biological studies 629-82-3, Dicaprylyl ether 1338-41-6, Sorbitan monostearate 7384-98-7, Propylene glycol dicaprylate 7440-59-7, Helium, biological studies 7727-37-9, Nitrogen, biological 7782-44-7, Oxygen, biological studies 10102-43-9, Nitrogen oxide (NO), biological studies 12441-09-7D, Sorbitan, mono-, di-, and triglycerides 25322-68-3D, PEG, ester with stearic acid 25322-68-3D, Polyethylene glycol, esters with fatty acids 36653-82-4, Cetyl alcohol 37309-58-3, Polydecene 52845-07-5, 59030-00-1, Polysynlane 60908-77-2, Isohexadecane Isoeicosane 93803-86-2, Octyl isostearate RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (foaming cosmetic prepns. comprising a lipid phase)

L85 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:76559 HCAPLUS Full-text

DOCUMENT NUMBER:

138:112049

TITLE:

Foaming cosmetic preparations comprising a

lipid phase

INVENTOR(S):

Riedel, Heidi; Kroepke, Rainer; Bleckmann, Andreas;

Oelrichs, Ilka

PATENT ASSIGNEE(S):

Beiersdorf Ag, Germany

SOURCE:

PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT: 1

7

PATENT INFORMATION:

PATE	KIND DATE		APPLICATION NO.					DATE									
					- <b>-</b>		<del>-</del>	-		,				-	<b>-</b>		
WO 2	WO 2003007893					A2 20030130			NO 2	2002-1	EP79	20020716					
WO 2	WO 2003007893					20030731											
	W: JP	, US															
	RW: AT	, BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	, ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	
	LU	, MC,	NL,	PT,	SE,	SK,	TR										
DE 1	DE 10134786				Al 20030206				DE 2001-10134786						20010717		
EP 1	411884			A2	2	2004	0428	]	EP 2	2002-	7647	02		2	0020	716	
	R: AT	, BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
	ΙE	, SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	, TR,	BG,	CZ,	EE,	SK			
US 2004197295				A1	2	20041007			US 2004-760086					20040116			
PRIORITY	APPLN.	INFO	.:					]	DE 2	2001-	1013	4786		A 2	0010	717	
								Ţ	MO 2	2002-	EP79	07		W 2	0020	716	

ED Entered STN: 31 Jan 2003

The invention relates to foamable cosmetic or dermatol . prepns. comprising AΒ (I) at least one emulsifier selected from the group of fully, partially or non neutralized, branched and/or unbranched, saturated and/or unsatd. fatty acids with a chain length of 10-40 carbon atoms, (B) at least one emulsifier (B), selected from the group of polyethoxylated fatty acid esters with a chain length of 10-40 carbon atoms and with a degree of ethoxylation of 5 -100 and (C) at least one co-emulsifier C, selected from the group of saturated and/or unsatd., branched and/or unbranched fatty alcs. with a chain length of 10-40 carbon atoms, and (II) up to 50%- in relation to the entire weight of the foamable preparation- of a lipid phase which contains one or several lipids from the group of silicon oils or silicon waxes. The compns. are filled in a pressure container and dosed with gas. Thus a foamy O/W cream contained in the emulsion (weight/weight)%: stearic acid 3.00; cetyl alc. 8.50; PEG-20 stearate 8.50; cyclomethicone 10.00; C12-C13 alkyl lactate 5.00; isohexadecane 2.00; glycerin 5.00; sodium hydroxide q.s.; preservative q.s.; perfume q.s.;

```
water to 100; pH 6.5-7.5. A foam was prepared by using 90 volume/volume% of
     the emulsion and 10 volume/volume% propane-butane mixture
     ICM A61K007-00
IC
CC
     62-4 (Essential Oils and Cosmetics)
     Section cross-reference(s): 63
     emulsion foam cosmetics lipid
ST
IT
     Alcohols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C16-18; foaming cosmetic prepns. comprising a lipid phase)
     Glycerides, biological studies
IT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C8-10; foaming cosmetic prepns. comprising a lipid phase)
     Fats and Glyceridic oils, biological studies
IT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (avocado; foaming cosmetic prepns. comprising a lipid phase)
IT
     Cosmetics
        (creams; foaming cosmetic prepns. comprising a
        lipid phase)
     Cyclosiloxanes
IT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me; foaming cosmetic prepns. comprising a lipid phase)
     Polyoxyalkylenes, biological studies
IT
     Polyoxyalkylenes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (ester with stearic acid; foaming cosmetic prepns. comprising
        a lipid phase)
     Polyoxyalkylenes, biological studies
IT
     Polyoxyalkylenes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (esters with fatty acids; foaming cosmetic prepns. comprising
        a lipid phase)
ΙT
     Alcohols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (fatty; foaming cosmetic prepns. comprising a lipid phase)
IT
     Air
     Containers
     Emulsifying agents
     Emulsions
     Polarity
     Propellants (sprays and foams)
     Sunscreens
        (foaming cosmetic prepns. comprising a lipid phase)
     Fatty acids, biological studies
IT
     Lipids, biological studies
     Paraffin oils
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (foaming cosmetic prepns. comprising a lipid phase)
     Glass, biological studies
IT
     Metals, biological studies
     Plastics, biological studies
     RL: COS (Cosmetic use); DEV (Device component use); BIOL (Biological
     study); USES (Uses)
        (foaming cosmetic prepns. comprising a lipid phase)
IT
     Cosmetics
        (foams; foaming cosmetic prepns. comprising a lipid phase)
     Hydrocarbons, biological studies
IT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (halo; foaming cosmetic prepns. comprising a lipid phase)
```

IT

Cosmetics

(lotions; foaming cosmetic prepns. comprising a lipid phase)

IT Cosmetics

(moisturizers; foaming cosmetic prepns. comprising a lipid phase)

IT Emulsions

(oil-in-water; foaming cosmetic preprise, comprising a lipid phase)

IT Drug delivery systems

(ointments, creams; foaming cosmetic prepns.

comprising a lipid phase)

50-21-5D, Lactic acid, C12-C13 alkyl ester 57-10-3, Palmitic acid, IT 57-11-4, Stearic acid, biological studies biological studies 74-98-6, Propane, biological studies Stearic acid, ester with PEG 112-72-1, Myristyl alcohol 106-97-8, Butane, biological studies 115-10-6, Dimethyl ether 124-38-9, Carbon dioxide, biological studies 7384-98-7, Propylene glycol dicaprylate 1338-41-6, Sorbitan monostearate 7727-37-9, Nitrogen, biological 7440-59-7, Helium, biological studies 7782-44-7, Oxygen, biological studies 10102-43-9, Nitrogen oxide (NO), biological studies 12441-09-7D. 25322-68-3D, PEG, ester with Sorbitan, mono-, di-, and triglycerides 25322-68-3D, Polyethylene glycol, esters with fatty acids stearic acid 36653-82-4, Cetyl alcohol 59030-00-1, Polysynlane 60908-77-2, Isohexadecane 68171-38-0, Propylene glycol monoisostearate 93803-86-2, Octyl isostearate

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (foaming cosmetic prepns. comprising a lipid phase)

L85 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:665090 HCAPLUS Full-text

DOCUMENT NUMBER:

140:47268

TITLE:

Characterization of a novel nitric

oxide releasing bioactive

glass

AUTHOR (S):

PUBLISHER:

Pryce, R. S.; Hench, L. L.

CORPORATE SOURCE:

Tissue Engineering Centre, Department of Materials,

Imperial College, London, UK

SOURCE:

Key Engineering Materials (2003), 240-

242(Bioceramics), 205-208 CODEN: KEMAEY; ISSN: 1013-9826

Trans Tech Publications Ltd.

DOCUMENT TYPE: . Journal LANGUAGE: English

ED Entered STN: 26 Aug 2003

The development of NO releasing biomaterials is a new field, and has focussed AΒ on polymers for applications such as reducing platelet adhesion in the circulatory system. Its application in the field of orthopedic biomaterials has been limited even though NO has now been shown to be an important mol. in the role of osteogenesis. By combining the osteogenic properties of NO with that observed for bioactive glasses a new optimized bioactive glass can be produced. This paper looks at the dissoln. of NO from two NO doped bioactive glasses: 58S gel glass, and amine modified 58S gel- glass. In vitro bioactivity tests were performed in simulated body fluid (SBF) with the ionic concentration of the SBF after glass immersion analyzed using inductively coupled plasma atomic emission spectroscopy. Dissoln. studies have shown an enhanced release of NO from the amine-modified glass compared to the unmodified bioactive glass. The bioactivity of both glasses was not hindered by the NO doping step, with FTIR indicating the formation of a HCA layer. The modification of the 58S bioactive glass with an organosilane, aminopropyltriethoxysilane (APTS) resulted in increased chemical reaction

behavior of the glass due to the presence of amine groups on the surface. Measurement of NO release as determined by anal. of the nitrite concentration showed a 2000% increase for the amine modified 58S gel- glass. Further in vitro studies are underway to determine whether the specific effect of NO stimulation on human osteoblasts is reproducible with both NO doped 58S and NH58S bioactive gel-glass.

CC 63-7 (Pharmaceuticals)

ST nitric oxide bioactive glass

IT Bone

(artificial; characterization of novel nitric oxide releasing bioactive glass)

IT Prosthetic materials and Prosthetics

(bioactive glass; characterization of novel nitric oxide releasing bioactive

glass)

IT Bone formation

Dissolution

Human

Osteoblast

(characterization of novel nitric oxide releasing

bioactive glass)

IT 10102-43-9, Nitric oxide, biological studies

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(characterization of novel nitric oxide releasing

bioactive glass)

REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L85 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2000:900430 HCAPLUS Full-text

DOCUMENT NUMBER:

134:46817

TITLE:

Silver-containing, sol-gel derived bioglass

antibacterial compositions

INVENTOR (S):

Bellantone, Maria; Coleman, Nichola J.; Hench, Larry

L.

PATENT ASSIGNEE(S):

Usbiomaterials Corporation, USA

SOURCE:

PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT :	NO.			KIN	D	DATE		;	APPL:	ICAT:	ION 1	NO.		D	ATE	
WO	2000	0764	86		A1	-	2000	1221	1	WO 2	 000-1	US16:	207		2	0000	614
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CR,
		CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
		ID,	IL,	IN,	IS,	JΡ,	KE,	KG,	KP,	KR,	ΚŻ,	LC,	LK,	LR,	LS,	LT,	LU,
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,
		SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,	VN,	YU,
		ZA,	ZW														
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
CA	2377	402			A1		2000	1221		CA 2	000-	2377	402		2	0000	614
EP	1196	150			A1		2002	0417		EP 2	000-	9398	32		2	0000	614
EP	1196	150			B1		2005	0824									

```
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                        B1
                               20021119
                                         US 2000-593868
    US 6482444
                        T
T
    AT 302621
                              20050915 AT 2000-939832
                                                                20000614
                              20051130 PT 2000-939832
                        T
                                                                20000614
     PT 1196150
                       T3
     ES 2245644
                              20060116 ES 2000-939832
                                                                20000614
PRIORITY APPLN. INFO.:
                                         US 1999-139014P
                                                            P 19990614
                                          WO 2000-US16207 W 20000614
     Entered STN: 22 Dec 2000
ED
     Silver-containing, sol-gel derived bioactive glass compns. and methods of
AΒ
     preparation and use thereof are disclosed. The compns. can be in the form of
     particles, fibers and/or coatings, among other possible forms, and can be
     used, for example, for treating wounds, improving the success of skin grafts,
     reducing the inflammatory response and providing anti-bacterial treatments to
     a patient in need thereof. Anti-bacterial properties can be imparted to
     implanted materials, such as prosthetic implants, sutures, stents, screws,
     plates, tubes, and the like, by incorporating the compns. into or onto the
     implanted materials. The compns. can also be used to prepare devices used for
     in vitro and ex vivo cell culture.
     ICM A61K009-70
IC
     63-6 (Pharmaceuticals)
CC
     Prosthetic materials and Prosthetics
IT
        (bioactive glass; silver-containing, sol-gel derived
        bioglass antibacterial compns.)
IT
     Glass fibers, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (silver-containing, sol-gel derived bioglass antibacterial compns.)
     1303-86-2, Boron oxide, biological studies 1305-78-8,
IT
     Calcium oxide, biological studies 1309-48-4, Magnesium oxide,
     biological studies 1313-59-3, Sodium oxide, biological studies
     1314-56-3, Phosphorus oxide, biological studies 1344-28-1,
     Alumina, biological studies 7631-86-9, Silica, biological
     studies 7789-75-5, Calcium fluoride, biological studies
     12136-45-7, Potassium oxide, biological studies 20667-12-3,
     Silver oxide
     RL: OCU (Occurrence, unclassified); THU (Therapeutic use); BIOL
     (Biological study); OCCU (Occurrence); USES (Uses)
        (silver-containing, sol-gel derived bioglass antibacterial compns.)
                              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                        3
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L85 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:190879 HCAPLUS Full-text
                      132:227460
DOCUMENT NUMBER:
                       Anti-inflammatory and antimicrobial uses for
TITLE:
                        bioactive glass compositions
                        Greenspan, David C.; West, Jon K.; Lee, Sean; Meyers,
INVENTOR(S):
                        James L.; Diamond, Mason
                        US Biomaterials Corp., USA
PATENT ASSIGNEE(S):
SOURCE:
                        PCT Int. Appl., 39 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
                                         APPLICATION NO.
                                                                 DATE
     PATENT NO.
                     KIND
                               DATE
                       ----
                                          -----
     WO 2000015167
                        A1 20000323 WO 1999-US20644 19990910
```

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

```
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
            MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
            SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                              20000726 EP 1997-941714
    EP 1021148
                         A1
                                                                   19970919
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                          Т
                                            JP 1998-514928
    JP 2001503739
                                20010321
                                                                   19970919
                                            US 1998-164293
    US 2001041186
                         A1
                                20011115
                                                                   19981001
    US 6428800
                         B2
                                20020806
    HK 1018394
                         A1
                                20071005
                                           HK 1999-103555
                                                                   19990816
    CA 2343223
                         A1
                                20000323
                                            CA 1999-2343223
                                                                   19990910
    AU 9962447
                         Α
                                20000403
                                           AU 1999-62447
                                                                   19990910
                                            EP 1999-949609
                                                                   19990910
    EP 1123072
                         A1
                                20010816
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                          Т
                                20020806
                                            JP 2000-569752
                                                                   19990910
    JP 2002524203
                          В1
                                20040629
                                            US 2000-560046
                                                                   20000427
    US 6756060
                          A1
                                20041118
                                            US 2004-865636
                                                                   20040610
    US 2004228905
                                            US 1998-99725P
                                                                P 19980910
PRIORITY APPLN. INFO.:
                                            US 1999-392516
                                                                A 19990909
                                            US 1996-715911
                                                                A 19960919
                                                                W 19970919
                                            WO 1997-US16732
                                                                A2 19981001
                                            US 1998-164293
                                            WO 1999-US20644
                                                                W 19990910
                                            US 2000-560046
                                                                A1 20000427
```

ED Entered STN: 24 Mar 2000

Compns. and methods for treating wounds to significantly reduce the healing AΒ time, reduce the incidence of scar formation, improve the success of skin grafts, reduce the inflammatory response and providing anti-bacterial treatments to a patient in need thereof, that include small non-interlinked particles of bioactive glass or highly porous bioactive glass, are disclosed. Anti-bacterial solns. derived from bioactive glass, and methods of preparation and use thereof, are also disclosed. The compns. include non-interlinked particles of bioactive glass, alone or in combination with anti-bacterial agents and/or anti-inflammatory agents. The compns. can include an appropriate carrier for topical administration. Anti-bacterial properties can be imparted to implanted materials, such as prosthetic implants, sutures, stents, screws, plates, tubes, and the like, by incorporating small bioactive glass particles or porous bioactive glass into or onto the implanted materials. Antibacterial properties can also be imparted to devices used for in vitro and ex vivo cell culture by incorporating non-interlinked particles of bioactive glass into the devices. Anti-bacterial compns. derived from aqueous exts. of bioactive glass are also disclosed. These compns. can be used, for example, in food preparation, solns. used for cell culture, and buffer solns., such as i.v. solns. A would was treated with a mixture of particulate noninterlinked bioactive glass with a fine particle size, a topical antibiotic including sulfadiazine, and a petrolatum base carrier. After only 4 days, seepage of the wound was stopped and the surface of the wound appeared dry. If only a topical antibiotic was used to treat a wound in a patient with vasculitis, it would normally take about 2 seeks to stop seepage.

- IC A61F013-00; A61K007-48
- CC 63-6 (Pharmaceuticals)
- ST wound treatment bioactive glass; antiinflammatory bioactive glass; antimicrobial bioactive glass
- IT Anti-inflammatory agents

```
Antimicrobial agents
    Burn
     Particle size
     Wound healing promoters
        (anti-inflammatory and antimicrobial uses for bioactive
        glass compns.)
IT
    Glass fibers, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (anti-inflammatory and antimicrobial uses for bioactive
        glass compns.)
     Paraffin oils
IT
     Petrolatum
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (anti-inflammatory and antimicrobial uses for bioactive
        glass compns.)
     Prosthetic materials and Prosthetics
IT
        (bioactive glass; anti-inflammatory and
        antimicrobial uses for bioactive glass compns.)
IT
     Medical goods
        (dressings; anti-inflammatory and antimicrobial uses for
        bioactive glass compns.)
TT
     Cotton
        (gauze; anti-inflammatory and antimicrobial uses for bioactive
        glass compns.)
     Prosthetic materials and Prosthetics
IT
        (implants; anti-inflammatory and antimicrobial uses for
        bioactive glass compns.)
     Anesthetics
ТТ
     Antibiotics
     Drug delivery systems
        (topical; anti-inflammatory and antimicrobial uses for
        bioactive glass compns.)
     1303-86-2, Boron oxide, biological studies 1305-78-8,
IT
     Calcium oxide, biological studies 1309-48-4, Magnesium oxide,
     biological studies 1313-59-3, Sodium oxide, biological studies
     1314-56-3, Phosphorus oxide, biological studies 7631-86-9
     , Silica, biological studies 7789-75-5, Calcium fluoride,
     biological studies 12136-45-7, Potassium oxide, biological
     studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); OCU (Occurrence, unclassified); THU (Therapeutic
     use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
        (anti-inflammatory and antimicrobial uses for bioactive
        glass compns.)
     60-54-8, Tetracycline
                             68-35-9, Sulfadiazine
TT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (anti-inflammatory and antimicrobial uses for bioactive
        glass compns.)
                                57-62-5, Chlortetracycline
                                                              114-07-8,
     56-75-7, Chloramphenicol
TT
                                           130-26-7, Clioquinol
                                                                   138-39-6,
                    119-04-0, Framycetin
     Erythromycin
                                       1404-04-2, Neomycin
                                                               1404-26-8,
     Mafenide
                1403-66-3, Gentamicin
                   1405-87-4, Bacitracin 1405-97-6, Gramicidin
                                                                    6990-06-3,
     Polymyxin b
                   12650-69-0, Mupirocin 18323-44-9, Clindamycin
     Fusidic acid
     22199-08-2, Silver sulfadiazine
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
```

(anti-inflammatory and antimicrobial uses for bioactive glass compns.)

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L85 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1999:271831 HCAPLUS Full-text

DOCUMENT NUMBER:

131:65727

TITLE:

Photolytic Generation of Nitric Oxide through a Porous Glass

Partitioning Membrane

AUTHOR(S):

Zhelyaskov, Valentin R.; Godwin, Dwayne W.

CORPORATE SOURCE:

World Precision Instruments, Inc., Sarasota, FL,

34240-9258, USA

SOURCE:

Nitric Oxide (1998), 2(6), 454-459 CODEN: NIOXF5; ISSN: 1089-8603

PUBLISHER:

Academic Press

DOCUMENT TYPE:

Journal English

LANGUAGE:

Entered STN: 03 May 1999

- The authors report a new method of generating nitric oxide that possesses AΒ several potential advantages for exptl. use. This method consists of a microphotolysis chamber where NO is released by illuminating photolabile NO donors with light from a xenon lamp. NO then diffuses through a porous glass membrane to the exptl. preparation The authors observed that the rate of NO generation is a linear function of light intensity. Due to a dynamic equilibrium between the mechanisms of NO generation and dissipation (by diffusion or oxidation) the NO concentration in the exptl. cuvette can be reversibly and reproducibly controlled. The major potential advantages of this device include its use as a NO point source, and the ability to partition the NO donor compound from the exptl. preparation by a porous glass membrane. The diffusion of the caging moiety through the membrane is insignificant as seen by absorption spectroscopy due to its large relative size to NO. In this way, the porous glass membrane protects the preparation from the potential bioactive effects of the caging moiety, which is an important consideration for biol. expts. (c) 1998 Academic Press.
- CC 74-1 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
  Section cross-reference(s): 8
- st nitric oxide photochem generation porous partitioning glass membrane; photolysis sodium nitroferricyanide nitric oxide release
- IT Neurotransmitters

RL: MSC (Miscellaneous)

(caged; photolytic generation of nitric oxide in microphotolysis chamber with porous glass membrane from photolabile NO donors in relation to)

IT Reactors

(photochem., micro-; photolytic generation of nitric oxide in microphotolysis chamber with porous glass membrane in relation to)

IT Photolysis

(photolytic generation of nitric oxide in microphotolysis chamber with porous glass membrane)

IT Glass, uses

RL: DEV (Device component use); USES (Uses)
 (porous, membrane; photolytic generation of nitric
 oxide in microphotolysis chamber with porous glass
 membrane)

IT 10102-43-9, Nitric oxide, processes

RL: FMU (Formation, unclassified); PEP (Physical, engineering or chemical process); FORM (Formation, nonpreparative); PROC (Process)

(photolytic generation of nitric oxide in

microphotolysis chamber with porous glass membrane)

14402-89-2, Sodium nitroferricyanide(III) dihydrate IT

RL: RCT (Reactant); RACT (Reactant or reagent)

(photolytic generation of nitric oxide in

microphotolysis chamber with porous glass membrane)

REFERENCE COUNT: 11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d L85 25-31 ibib ab hit

L85 ANSWER 25 OF 31 MEDLINE on STN

ACCESSION NUMBER: 2004193053 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 15089042

Controlled release of Bordetella bronchiseptica TITLE:

dermonecrotoxin (BBD) vaccine from BBD-loaded

chitosan microspheres in vitro.

Jiang Hu-Lin; Park In-Kyu; Shin Na-Ri; Yoo Han-Sang; Akaike AUTHOR:

Toshihiro; Cho Chong-Su

School of Agricultural Biotechnology, Seoul National CORPORATE SOURCE:

University, Seoul 151-742, Korea.

Archives of pharmacal research, (2004 Mar) Vol. 27, No. 3, SOURCE:

pp. 346-50.

Journal code: 8000036. ISSN: 0253-6269.

Korea (South) PUB. COUNTRY:

Journal; Article; (JOURNAL ARTICLE) DOCUMENT TYPE:

(RESEARCH SUPPORT, NON-U.S. GOV'T)

English LANGUAGE:

Priority Journals FILE SEGMENT:

200411 ENTRY MONTH:

Entered STN: 20 Apr 2004 ENTRY DATE:

> Last Updated on STN: 5 Nov 2004 Entered Medline: 4 Nov 2004

Chitosan microspheres were prepared by ionic gelation process with sodium AB sulfate for nasal vaccine delivery. Bordetella Bronchiseptica Dermonecrotoxin (BBD) as a major virulence factor of a causative agent of atrophic rhinitis (AR) was loaded to the chitosan microspheres for vaccination. Morphology of BBD-loaded chitosan microspheres was observed as spherical shapes. average particle sizes of the BBD-loaded chitosan microspheres were about 2.69 microm. More BBD was released with an increase of molecular weight of chitosan and with an increase of medium pH in vitro due to weaker intermolecular interaction between chitosan and BBD. Tumor necrosis factoralpha (TNFalpha) and nitric oxide (NO) from RAW264.7 cells stimulated with BBD-loaded chitosan microspheres were gradually secreted, suggesting that released BBD from chitosan microspheres had immune stimulating activity of AR

Controlled release of Bordetella bronchiseptica dermonecrotoxin (BBD) vaccine from BBD-loaded chitosan microspheres in vitro.

Chitosan microspheres were prepared by ionic gelation process with sodium AΒ sulfate for nasal vaccine delivery. Bordetella Bronchiseptica Dermonecrotoxin (BBD) as a major virulence factor of a causative agent of atrophic rhinitis (AR) was loaded to the chitosan microspheres for vaccination. Morphology of BBD-loaded chitosan microspheres was observed as spherical shapes. The average particle sizes of the BBD-loaded chitosan microspheres were about 2.69 microm. More BBD was released with an increase of molecular weight of chitosan and with an increase of medium pH in vitro due to weaker intermolecular interaction between chitosan and BBD. Tumor necrosis factor-

alpha (TNFalpha) and nitric oxide (NO) from RAW264.7 cells stimulated with BBD-loaded chitosan microspheres were gradually secreted, suggesting that released BBD from chitosan microspheres had immune stimulating activity of AR vaccine.

CT Animals

> \*Bacterial Toxins: PK, pharmacokinetics \*Bacterial Vaccines: PK, pharmacokinetics Bordetella bronchiseptica: DE, drug effects \*Bordetella bronchiseptica: ME, metabolism

Cell Line

\*Chitin: AA, analogs & derivatives \*Chitin: PK, pharmacokinetics Chitin: UL, ultrastructure

Chitosan

Delayed-Action Preparations: PK, pharmacokinetics

Light Mice

Microscopy, Electron, Scanning

\*Microspheres

Scattering, Radiation

Swine

\*Transglutaminases: PK, pharmacokinetics Transglutaminases: UL, ultrastructure

\*Virulence Factors, Bordetella: PK, pharmacokinetics

0 (Bacterial Toxins); 0 (Bacterial Vaccines); 0 (Delayed-Action CN Preparations); 0 (Virulence Factors, Bordetella); 0 (dermonecrotic toxin, Bordetella); EC 2.3.2.13 (Transglutaminases)

L85 ANSWER 26 OF 31 MEDLINE on STN

2003571548 MEDLINE Full-text ACCESSION NUMBER:

PubMed ID: 14623977 DOCUMENT NUMBER:

Microfabricated needles for transdermal delivery of TITLE:

macromolecules and nanoparticles: fabrication

methods and transport studies.

McAllister Devin V; Wang Ping M; Davis Shawn P; Park AUTHOR:

Jung-Hwan; Canatella Paul J; Allen Mark G; Prausnitz Mark R

School of Chemical and Biomolecular Engineering, Georgia CORPORATE SOURCE:

Institute of Technology, Atlanta 30332, USA.

Proceedings of the National Academy of Sciences of the SOURCE:

United States of America, (2003 Nov 25) Vol. 100, No. 24,

pp. 13755-60. Electronic Publication: 2003-11-17.

Journal code: 7505876. ISSN: 0027-8424.

PUB. COUNTRY:

United States

DOCUMENT TYPE: (IN VITRO)

Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

(RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.) (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200402

ENTRY DATE: Entered STN: 16 Dec 2003

> Last Updated on STN: 3 Feb 2004 Entered Medline: 2 Feb 2004

Arrays of micrometer-scale needles could be used to deliver drugs, proteins, AB and particles across skin in a minimally invasive manner. We therefore developed microfabrication techniques for silicon, metal, and biodegradable polymer microneedle arrays having solid and hollow bores with tapered and beveled tips and feature sizes from 1 to 1,000 microm. When solid microneedles were used, skin permeability was increased in vitro by orders of

magnitude for macromolecules and particles up to 50 nm in radius. Intracellular delivery of molecules into viable cells was also achieved with high efficiency. Hollow microneedles permitted flow of microliter quantities into skin in vivo, including microinjection of insulin to reduce blood glucose levels in diabetic rats.

TI Microfabricated needles for transdermal delivery of macromolecules and nanoparticles: fabrication methods and transport studies.

AB Arrays of micrometer-scale needles could be used to deliver drugs, proteins, and particles across skin in a minimally invasive manner. We therefore developed microfabrication techniques for silicon, metal, and biodegradable polymer microneedle arrays having solid and hollow bores with tapered and beveled tips and feature sizes from 1 to 1,000 microm. When solid microneedles were used, skin permeability was increased in vitro by orders of magnitude for macromolecules and particles up to 50 nm in radius. Intracellular delivery of molecules into viable cells was also achieved with high efficiency. Hollow microneedles permitted flow of microliter quantities into skin in vivo, including microinjection of insulin to reduce blood glucose levels in diabetic rats.

CT Check Tags: Male

Administration, Cutaneous

Animals

Biomedical Engineering

Blood Glucose: ME, metabolism

Cell Line

Diabetes Mellitus, Experimental: BL, blood

Diabetes Mellitus, Experimental: DT, drug therapy

Equipment Design

Glass

Humans

Insulin: AD, administration & dosage

Macromolecular Substances

Metals

\*Microinjections: IS, instrumentation

Models, Biological Nanotechnology

Polymers Rats

Silicon

\*Syringes

L85 ANSWER 27 OF 31 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on

STN

ACCESSION NUMBER: 2002:450794 BIOSIS Full-text

DOCUMENT NUMBER: PREV200200450794

TITLE: Solid lipid nanoparticles as carrier for

sunscreens: In vitro release and in vivo skin

penetration.

AUTHOR(S): Wissing, S. A.; Mueller, R. H. [Reprint author]

CORPORATE SOURCE: Department of Pharmaceutics, Biopharmaceutics and

Biotechnology, Free University of Berlin, Kelchstrasse 31,

D-12169, Berlin, Germany mpharma@zedat.fu-berlin.de

SOURCE: Journal of Controlled Release, (17 June, 2002) Vol. 81, No.

3, pp. 225-233. print.

CODEN: JCREEC. ISSN: 0168-3659.

DOCUMENT TYPE:

Article

LANGUAGE:

English

ENTRY DATE: Entered STN: 21 Aug 2002

Last Updated on STN: 21 Aug 2002

The aim of this study was the comparison of two different formulations (solid lipid nanoparticles (SLN) and conventional o/w emulsion) as carrier systems for the molecular sunscreen oxybenzone. The influence of the carrier on the rate of release was studied in vitro with a membrane-free model. The release rate could be decreased by up to 50% with the SLN formulation. Further in vitro measurements with static Franz diffusion cells were performed. In vivo, penetration of oxybenzone into stratum corneum on the forearm was investigated by the tape stripping method. It was shown that the rate of release is strongly dependent upon the formulation and could be decreased by 30-60% in SLN formulations. In all test models, oxybenzone was released and penetrated into human skin more quickly and to a greater extent from the emulsions. The rate of release also depends upon the total concentration of oxybenzone in the formulation. In vitro-in vivo correlations could be made qualitatively.

TI Solid lipid nanoparticles as carrier for sunscreens: In vitro release and in vivo skin penetration.

The aim of this study was the comparison of two different formulations (solid lipid nanoparticles (SLN) and conventional o/w emulsion) as carrier systems for the molecular sunscreen oxybenzone. The influence of the carrier on the rate of release was studied in vitro with a membrane-free model. The release rate could be decreased by up to 50% with the SLN formulation. Further in vitro measurements with static Franz diffusion cells were performed. In vivo, penetration of oxybenzone into stratum corneum on the forearm was investigated by the tape stripping method. It was shown that the rate of release is strongly dependent upon the formulation and could be decreased by 30-60% in SLN formulations. In all test models, oxybenzone was released and penetrated into human skin more quickly and to a greater extent from the emulsions. The rate of release also depends upon the total concentration of oxybenzone in the formulation. In vitro-in vivo correlations could be made qualitatively.

IT Major Concepts

Dermatology (Human Medicine, Medical Sciences);

Pharmacology

IT Parts, Structures, & Systems of Organisms

skin: integumentary system; stratum corneum: integumentary
system

IT Chemicals & Biochemicals

oil-in-water emulsion: drug delivery system; oxybenzone: dermatological-drug, formulation, sunscreen; solid lipid nanoparticles: drug delivery system; solid liquid nanoparticle

IT Methods & Equipment

Franz glass diffusion cells: laboratory equipment; tape stripping method: measurement method

IT Miscellaneous Descriptors

release rate

L85 ANSWER 28 OF 31 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2005459787 EMBASE Full-text

TITLE: Continuous contact- and contamination-free ultrasonic

emulsification - A useful tool for pharmaceutical

development and production.

AUTHOR: Freitas S.; Hielscher G.; Merkle H.P.; Gander B.

CORPORATE SOURCE: B. Gander, Institute of Pharmaceutical Sciences, ETH

Zurich-Honggerberg, 8093 Zurich, Switzerland.

bruno.gander@pharma.ethz.ch

SOURCE: Ultrasonics Sonochemistry, (Jan 2006) Vol. 13, No. 1, pp.

76-85. Refs: 20

ISSN: 1350-4177 CODEN: ULSOER

PUBLISHER IDENT.: S 1350-4177(04)00183-X

COUNTRY:

Netherlands

DOCUMENT TYPE:

Journal; Article

FILE SEGMENT:

029 Clinical and Experimental Biochemistry

LANGUAGE: SUMMARY LANGUAGE: English English

ENTRY DATE:

Entered STN: 27 Oct 2005

Last Updated on STN: 27 Oct 2005

A novel concept was developed here for the continuous, contact- and AB contamination-free treatment of fluid mixtures with ultrasound. It is based on exciting a steel jacket with an ultrasonic transducer, which transmitted the sound waves via pressurised water to a glass tube installed inside the jacket. Thus, no metallic particles can be emitted into the sonicated fluid, which is a common problem when a sonotrode and a fluid are in direct contact. Moreover, contamination of the fluid from the environment can be avoided, making the novel ultrasonic flow-through cell highly suitable for aseptic production of pharmaceutical preparations. As a model system, vegetable oilin-water emulsions, fed into the cell as coarse pre-emulsions, were studied. The mean droplet diameter was decreased by two orders of magnitude yielding Sauter diameters of 0.5  $\mu m$  and below with good repeatability. Increasing the residence time in the ultrasonic field and the sonication power both decreased the emulsion mean diameter. Furthermore, the ultrasonic flow-through cell was found to be well suited for the production of nanoparticles of biodegradable polymers by the emulsion-solvent extraction/ evaporation method. Here, perfectly spherical particles of a volume mean diameter of less than 0.5  $\mu m$ could be prepared. In conclusion, this novel technology offers a pharmaceutically interesting platform for nanodroplet and nanoparticle production and is well suited for aseptic continuous processing. .COPYRGT. 2004 Elsevier B.V. All rights reserved.

TI Continuous contact- and contamination-free ultrasonic emulsification - A useful tool for pharmaceutical development and production.

A novel concept was developed here for the continuous, contact- and AB contamination-free treatment of fluid mixtures with ultrasound. It is based on exciting a steel jacket with an ultrasonic transducer, which transmitted the sound waves via pressurised water to a glass tube installed inside the jacket. Thus, no metallic particles can be emitted into the sonicated fluid, which is a common problem when a sonotrode and a fluid are in direct contact. Moreover, contamination of the fluid from the environment can be avoided, making the novel ultrasonic flow-through cell highly suitable for aseptic production of pharmaceutical preparations. As a model system, vegetable oilin-water emulsions, fed into the cell as coarse pre-emulsions, were studied. The mean droplet diameter was decreased by two orders of magnitude yielding Sauter diameters of 0.5  $\mu m$  and below with good repeatability. Increasing the residence time in the ultrasonic field and the sonication power both decreased the emulsion mean diameter. Furthermore, the ultrasonic flow-through cell was found to be well suited for the production of nanoparticles of biodegradable polymers by the emulsion-solvent extraction/ evaporation method. Here, perfectly spherical particles of a volume mean diameter of less than 0.5  $\mu m$ could be prepared. In conclusion, this novel technology offers a pharmaceutically interesting platform for nanodroplet and nanoparticle production and is well suited for aseptic continuous processing. .COPYRGT. 2004 Elsevier B.V. All rights reserved.

CT Medical Descriptors:

article
emulsion
evaporation
extraction
fluid flow
model
priority journal

reproducibility
\*ultrasound
CT Drug Descriptors:
nanoparticle
vegetable oil
water oil cream

L85 ANSWER 29 OF 31 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 2004084859 EMBASE Full-text

TITLE: Effect of cellular uptake of gelatin nanoparticles

on adhesion, morphology and cytoskeleton organisation of

human fibroblasts.

AUTHOR: Gupta A.K.; Gupta M.; Yarwood S.J.; Curtis A.S.G.

CORPORATE SOURCE: A.K. Gupta, 3/2, 15 Southcroft Street, Glasgow G51 2DH,

United Kingdom. akqupta25@hotmail.com

SOURCE: Journal of Controlled Release, (5 Mar 2004) Vol. 95, No. 2,

pp. 197-207.
Refs: 35

ISSN: 0168-3659 CODEN: JCREEC

COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 037 Drug Literature Index

039 Pharmacy 052 Toxicology

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 18 Mar 2004

Last Updated on STN: 18 Mar 2004

The aim of present study was to prepare nanometer sized particles of gelatin AB via water-in-oil microemulsion system for drug and gene delivery applications. In this study, cross-linked gelatin nanoparticles encapsulating a fluorescent marker molecule fluorescein isothiocyanate-dextran (FITC-Dex, Mol. Weight 19.3kDa) have been prepared, characterized and their influence on human fibroblasts has been assessed in terms of cell adhesion, cytotoxicity, light microscopy, scanning electron microscopy (SEM), transmission electron microscopy (TEM) and observation of cytoskeleton organisation. Gelatin nanoparticles were prepared inside the aqueous cores of sodium bis(2ethylhexyl) sulfosuccinate (AOT)/n-hexane reverse micelles. Transmission electron microscopy image showed that the particles are spherical in shape with size of 37  $\pm$  0.84 nm diameter. The release of FITC-Dex from the nanoparticles in phosphate buffer saline (pH 7.4) is found to increase with time and about 80% of the encapsulated dye is released in 6 h. Cell adhesion studies with human fibroblasts have shown that gelatin nanoparticles do not affect the number of cells adhered to glass as compared to control cells with no particles. Standard cell viability assay demonstrated that cells incubated with gelatin nanoparticles remained more than 100% viable at concentration as high as 500  $\mu$ g/ml. From SEM image, it was observed that the nanoparticles were internalised and the fibroblasts exhibited vacuoles in the cell body with cell membrane abnormalities. Endocytosis of nanoparticles was confirmed from TEM studies and it resulted in disruption of F-actin and  $\beta$ -tubulin cytoskeleton. These studies show that the gelatin nanoparticles prepared by water-in-oil microemulsion systems are endocytosed by the fibroblasts without being toxic to cells even at high concentration of nanoparticles. . COPYRGT. 2004 Elsevier B.V. All rights reserved.

TI Effect of cellular uptake of gelatin nanoparticles on adhesion, morphology and cytoskeleton organisation of human fibroblasts.

AB The aim of present study was to prepare nanometer sized particles of gelatin via water-in-oil microemulsion system for drug and gene delivery applications. In this study, cross-linked gelatin nanoparticles encapsulating a fluorescent

marker molecule fluorescein isothiocyanate-dextran (FITC-Dex, Mol. Weight 19.3kDa) have been prepared, characterized and their influence on human fibroblasts has been assessed in terms of cell adhesion, cytotoxicity, light microscopy, scanning electron microscopy (SEM), transmission electron microscopy (TEM) and observation of cytoskeleton organisation. Gelatin nanoparticles were prepared inside the aqueous cores of sodium bis(2ethylhexyl) sulfosuccinate (AOT)/n-hexane reverse micelles. Transmission electron microscopy image showed that the particles are spherical in shape with size of 37  $\pm$  0.84 nm diameter. The release of FITC-Dex from the nanoparticles in phosphate buffer saline (pH 7.4) is found to increase with time and about 80% of the encapsulated dye is released in 6 h. Cell adhesion studies with human fibroblasts have shown that gelatin nanoparticles do not affect the number of cells adhered to glass as compared to control cells with no particles. Standard cell viability assay demonstrated that cells incubated with gelatin nanoparticles remained more than 100% viable at concentration as high as 500  $\mu g/ml$ . From SEM image, it was observed that the nanoparticles were internalised and the fibroblasts exhibited vacuoles in the cell body with cell membrane abnormalities. Endocytosis of nanoparticles was confirmed from TEM studies and it resulted in disruption of F-actin and  $\beta$ -tubulin cytoskeleton. These studies show that the gelatin nanoparticles prepared by water-in-oil microemulsion systems are endocytosed by the fibroblasts without being toxic to cells even at high concentration of nanoparticles. . COPYRGT. 2004 Elsevier B.V. All rights reserved.

CT Medical Descriptors:

article
\*cell adhesion
cell disruption
cell membrane
\*cell structure
cell vacuole

cell viability controlled study

\*cytoskeleton cytotoxicity

drug delivery system

drug uptake

encapsulation endocytosis

\*fibroblast

fluorescence

gene targeting

human

human cell

micelle

microemulsion

microscopy

priority journal

protein cross linking

scanning electrochemical microscopy

transmission electron microscopy

CT Drug Descriptors:

beta tubulin: EC, endogenous compound

docusate sodium

F actin: EC, endogenous compound fluorescein isothiocyanate dextran

\*gelatin: DV, drug development

\*gelatin: TO, drug toxicity

\*gelatin: PR, pharmaceutics

hexane

nanoparticle

water oil cream

L85 ANSWER 30 OF 31 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights

reserved on STN

ACCESSION NUMBER: 2003500361 EMBASE Full-text

TITLE: Microfabricated needles for transdermal delivery of

macromolecules and nanoparticles: Fabrication

methods and transport studies.

AUTHOR: McAllister D.V.; Wang P.M.; Davis S.P.; Park J.-H.;

Canatella P.J.; Allen M.G.; Prausnitz M.R.

CORPORATE SOURCE: M.R. Prausnitz, Sch. of Chem. and Biomol. Eng., Georgia

Institute of Technology, Atlanta, GA 30332, United States.

mark.prausnitz@chbe.gatech.edu

SOURCE: Proceedings of the National Academy of Sciences of the

United States of America, (25 Nov 2003) Vol. 100, No.

SUPPL. 2, pp. 13755-13760.

Refs: 28

ISSN: 0027-8424 CODEN: PNASA6

COUNTRY: United States
DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 027 Biophysics, Bioengineering and Medical

Instrumentation Endocrinology

037 Drug Literature Index

LANGUAGE: English
SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 5 Jan 2004

003

Last Updated on STN: 5 Jan 2004

- AB Arrays of micrometer-scale needles could be used to deliver drugs, proteins, and particles across skin in a minimally invasive manner. We therefore developed microfabrication techniques for silicon, metal, and biodegradable polymer microneedle arrays having solid and hollow bores with tapered and beveled tips and feature sizes from 1 to 1,000 µm. When solid microneedles were used, skin permeability was increased in vitro by orders of magnitude for macromolecules and particles up to 50 nm in radius. Intracellular delivery of molecules into viable cells was also achieved with high efficiency. Hollow microneedles permitted flow of microliter quantities into skin in vivo, including microinjection of insulin to reduce blood glucose levels in diabetic rats.
- TI Microfabricated needles for transdermal delivery of macromolecules and nanoparticles: Fabrication methods and transport studies.
- AP Arrays of micrometer-scale needles could be used to deliver drugs, proteins, and particles across skin in a minimally invasive manner. We therefore developed microfabrication techniques for silicon, metal, and biodegradable polymer microneedle arrays having solid and hollow bores with tapered and beveled tips and feature sizes from 1 to 1,000 µm. When solid microneedles were used, skin permeability was increased in vitro by orders of magnitude for macromolecules and particles up to 50 nm in radius. Intracellular delivery of molecules into viable cells was also achieved with high efficiency. Hollow microneedles permitted flow of microliter quantities into skin in vivo, including microinjection of insulin to reduce blood glucose levels in diabetic rats.

CT Medical Descriptors:

animal experiment

animal model

article

biodegradability

cadaver

cell culture

controlled study

```
diabetes mellitus: DT, drug therapy
     *drug delivery system
     drug diffusion
     electroplating industry
     glucose blood level
    human
    human cell
    human tissue
     in vitro study
     *macromolecule
     male
    microinjection
     *needle
    nonhuman
    particle size
    priority journal
    rat
     rat strain
       skin permeability
CT
     Drug Descriptors:
     copper
       *glass
     *isophane insulin: AD, drug administration
       *isophane insulin: DT, drug therapy
     *isophane insulin: TD, transdermal drug administration
     *metal
       *nanoparticle
     polyglactin
     *polymer
     *silicon
     titanium
L85 ANSWER 31 OF 31 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights
     reserved on STN
ACCESSION NUMBER:
                    2003428074 EMBASE
                                           Full-text
                    Shedding light on bioscience. Symposium on optical imaging:
TITLE:
                    Applications to biology and medicine.
                    Cole M.J.; Pirity M.; Hadjantonakis A.-K.
AUTHOR:
                    A.-K. Hadjantonakis, Department of Genetics/Development,
CORPORATE SOURCE:
                    College of Physicians and Surgeons, Columbia University,
                    701 West 168th Street, New York, NY 10032, United States.
                    akh39@columbia.edu
                    EMBO Reports, (Sep 2003) Vol. 4, No. 9, pp. 838-843.
SOURCE:
                    Refs: 12
                    ISSN: 1469-221X CODEN: ERMEAX
COUNTRY:
                    United Kingdom
DOCUMENT TYPE:
                    Journal; Conference Article; (Conference paper)
FILE SEGMENT:
                    014
                            Radiology
                            Biophysics, Bioengineering and Medical
                    027
                            Instrumentation
LANGUAGE:
                    English
ENTRY DATE:
                    Entered STN: 6 Nov 2003
                    Last Updated on STN: 6 Nov 2003
CT
     Medical Descriptors:
     biocompatibility
     bioluminescence
     biosensor
     cell transport
     conference paper
     confocal laser microscopy
```

crystal cytology degenerative disease diagnostic accuracy \*diagnostic imaging diagnostic procedure disease course echography electronics embryo development energy transfer \*fiber optics fluorescence analysis gene expression gene therapy genetic transcription molecular biology nonhuman optical coherence tomography Parkinson disease priority journal protein protein interaction sensitivity and specificity signal transduction skin cancer: DI, diagnosis symposium transgenic mouse Drug Descriptors: fluorescent dye glass fiber glial cell line derived neurotrophic factor green fluorescent protein luciferase nanoparticle tetracycline yellow fluorescent protein

## Full search history

#### => d his nofile

(FILE 'HOME' ENTERED AT 13:12:58 ON 07 DEC 2007)

```
FILE 'REGISTRY' ENTERED AT 13:15:56 ON 07 DEC 2007
               E O2SI/MF
                          PLU=ON O2SI/MF
Ll
            48 SEA ABB=ON
               E OCA/MF
               E CALCIUM OXIDE/CN
             1 SEA ABB=ON PLU=ON
                                   "CALCIUM OXIDE"/CN
L2
               E CAO/MF
L3
            12 SEA ABB=ON PLU=ON CAO/MF
               E NA2O/MF
             3 SEA ABB=ON
                          PLU=ON NA2O/MF
L4
               E 05P2/MF
             3 SEA ABB=ON PLU=ON O5P2/MF
L5
               E CAF2/MF
            12 SEA ABB=ON PLU=ON CAF2/MF
L6
               E B203/MF
L7
             6 SEA ABB=ON PLU=ON B2O3/MF
               E K2O/MF
                           PLU=ON
                                   K20/MF
L8
             .3 SEA ABB=ON
               E MGO/MF
                           PLU=ON MGO/MF
L9
            15 SEA ABB=ON
             1 SEA ABB=ON
                           PLU=ON
                                   7440-70-2/RN
L10
                                   7440-70-2/CRN
L11
         76286 SEA ABB=ON
                           PLU=ON
             1 SEA ABB=ON
                           PLU=ON PHOSPHORUS/CN
L12
               D L12 RN
              1 SEA ABB=ON
                           PLU=ON 7723-14-0/RN
L13
          59319 SEA ABB=ON
                           PLU=ON
                                   7723-14-0/CRN
L14
               E NO/MF
                           PLU=ON NO/MF
L15
            158 SEA ABB=ON
                           PLU=ON NITRIC OXIDE/CN
L16
              1 SEA ABB=ON
               E GLASS/CN
L17
              1 SEA ABB=ON PLU=ON GLASS/CN
   FILE 'HCAPLUS' ENTERED AT 13:25:50 ON 07 DEC 2007
        475546 SEA ABB=ON PLU=ON L1
L18
L19
          63186 SEA ABB=ON
                           PLU=ON
L20
         63211 SEA ABB=ON
                           PLU=ON
                                  L3
         22970 SEA ABB=ON PLU=ON
                                  L4
L21
L22
         21580 SEA ABB=ON PLU=ON
         34511 SEA ABB=ON PLU=ON
L23
L24
         25803 SEA ABB=ON PLU=ON L7
         18948 SEA ABB=ON
L25
                           PLU=ON
                                  L8
         108909 SEA ABB=ON
                           PLU=ON L9
L26
         397772 SEA ABB=ON
                           PLU=ON L10
L27
L28
         167312 SEA ABB=ON
                           PLU=ON L11
L29
         190534 SEA ABB=ON PLU=ON L12
L30
         190534 SEA ABB=ON
                           PLU=ON L13
         276235 SEA ABB=ON
L31
                           PLU=ON L14
L32
         106004 SEA ABB=ON
                           PLU=ON
L33
         103683 SEA ABB=ON
                           PLU=ON L16
            109 SEA ABB=ON
                           PLU=ON L17
L34
                           PLU=ON L18 AND L19 AND L20 AND L21 AND L22 AND
             31 SEA ABB=ON
               L23 AND L24 AND L25 AND L26
L36
             O SEA ABB=ON PLU=ON L35 AND L34
```

```
L37
             25 SEA ABB=ON PLU=ON L35 AND (BIOACTI? OR GLASS? OR VITR?)
                E NANOPARTICLES/CT
          58313 SEA ABB=ON PLU=ON NANOPARTICLES/CT
L38
                QUE ABB=ON PLU=ON ((COSMET? OR FACI? OR DERM? OR SKIN? OR
L39
                MEDICAM? OR MEDICIN?) (3A) (CREAM? OR LOTION? OR MAKE? OR COVER?
                OR LIPSTICK? OR GLOSS? OR EYELIN? OR MASC?))
            534 SEA ABB=ON PLU=ON GLASS? AND L39
L40
             0 SEA ABB=ON PLU=ON L35 AND L39
L41
          0 SEA ABB=ON PLU=ON L34 AND L39

1033 SEA ABB=ON PLU=ON (L32 OR L33) AND (GLASS? OR L34 OR L35)

3 SEA ABB=ON PLU=ON L43 AND L39
L42
L43
L44
            15 SEA ABB=ON PLU=ON L43 AND BIOACTIV?
L45
             O SEA ABB=ON PLU=ON (L34 OR L35) AND L38
L46
          0 SEA ABB=ON PLU=ON (L34 OR L35) AND NANOPART?
L47
          5916 SEA ABB=ON PLU=ON GLASS? AND NANOPARTIC?

3 SEA ABB=ON PLU=ON L35 AND (CREAM? OR LOTION? OR LIPSTICK? OR
L48
L49
                MAKE? OR COSMET?)
L50
             49 SEA ABB=ON PLU=ON (L35 OR L36 OR L37) OR L41 OR L42 OR (L44
                OR L45 OR L46 OR L47) OR L49
L51
                QUE ABB=ON PLU=ON AY<2001 OR PY<2001 OR PRY<2001 OR REVIEW/DT
L52
           23 SEA ABB=ON PLU=ON L50 AND L51
             3 SEA ABB=ON PLU=ON L50 AND L39
L53
             9 SEA ABB=ON PLU=ON L50 AND (COSMET? OR LOTION? OR LIPSTICK?
                OR MAKE(2A)UP OR FACIA? OR DERM? OR SKIN?)
            18 SEA ABB=ON PLU=ON L50 AND ((NITR?(2A)OXID?) OR L32 OR L33)
L55
             24 SEA ABB=ON PLU=ON (L53 OR L54 OR L55)
L56
                E COSMETICS/CT
          55573 SEA ABB=ON PLU=ON COSMETICS/CT
L57
            204 SEA ABB=ON PLU=ON L57 AND L38
               E GLASS/CT
        182495 SEA ABB=ON PLU=ON GLASS/CT
L59
          319 SEA ABB=ON PLU=ON L57 AND L59
L60
         6 SEA ABB=ON PLU=ON L58 AND L60
0 SEA ABB=ON PLU=ON L61 AND ((NITR?(2A)OXID?) OR L32 OR L33)
L61
L62
             24 SEA ABB=ON PLU=ON L56 OR L62
L63
                SAVE TEMP L63 BRO278HCTX/A
                E KESSLER S?/AU
            214 SEA ABB=ON PLU=ON KESSLER S?/AU
L64
                E LEE S?/AU
          60994 SEA ABB=ON PLU=ON LEE S?/AU
L65
              2 SEA ABB=ON PLU=ON L64 AND L65
L66
          61206 SEA ABB=ON PLU=ON L64 OR L65
L67
             13 SEA ABB=ON PLU=ON L67 AND SCHOTT?/CO,CS,PA,SO
L68
              5 SEA ABB=ON PLU=ON L68 AND (COSMET? OR PHARMAC? OR DERM? OR
L69
                SKIN?)
              O SEA ABB=ON PLU=ON L68 AND (NITR?(3A)OXID?)
L70
              6 SEA ABB=ON PLU=ON L66 OR L69 OR L70
L71
                SAVE TEMP L71 BRO278HCIN/A
     FILE 'MEDLINE, BIOSIS, EMBASE, DRUGU' ENTERED AT 13:57:32 ON 07 DEC 2007
             18 SEA ABB=ON PLU=ON GLASS? AND NANOPART? AND (COSMET? OR
L72
                LOTION? OR CREAM? OR LIPSTICK? OR GLOSS? OR LIPGLOSS? OR
                MAKEUP? OR MAKE(2N) UP OR DERM? OR FACIA? OR SKIN?)
           5814 SEA ABB=ON PLU=ON (NITRIC(2N) OXIDE) AND (COSMET? OR LOTION?
L73
                OR CREAM? OR LIPSTICK? OR GLOSS? OR LIPGLOSS? OR MAKEUP? OR
                MAKE(2N) UP OR DERM? OR FACIA? OR SKIN?)
L74
            669 SEA ABB=ON PLU=ON L73 AND (GLASS? OR VITR? OR SILIC?)
              2 SEA ABB=ON PLU=ON L74 AND ((NANO? OR MICRO?)(3N)(PARTIC? OR
L75
                BEAD? OR CAPSU? OR SPHER? OR GRAN? OR GRAIN?))
```

	10/030,276
0	SEA ABB=ON PLU=ON L74 AND ((NITRIC? OR OXIDE?)(3N)(PRESERV? OR STABIL? OR EMULS?))
20	SEA ABB=ON PLU=ON L72 OR L75 OR L76
	SEA ABB=ON PLU=ON L77 AND (COSMET? OR CREAM? OR LOTION? OR
. <b>-</b>	(LIP(2N) (STICK OR GLOSS?)) OR (MAKE(2N) (UP OR OVER))) D SCAN
7	SEA ABB=ON PLU=ON L77 AND (COSMET? OR PHARMAC? OR THERAP?)
. 7	SEA ABB=ON PLU=ON L78 OR L79
	SAVE TEMP L80 BRO278MLTX/A
1	SEA ABB=ON PLU=ON L66
3	SEA ABB=ON PLU=ON L68
	SEA ABB=ON PLU=ON L81 OR L82
•	SAVE TEMP L83 BRO278MLIN/A
	D QUE L71
	D QUE L83
	2 202 203
FTLE 'HCAP	LUS, BIOSIS, EMBASE' ENTERED AT 14:11:22 ON 07 DEC 2007
	DUP REM L71 L83 (0 DUPLICATES REMOVED)
•	ANSWERS '1-6' FROM FILE HCAPLUS
	ANSWERS '7-8' FROM FILE BIOSIS
	ANSWERS 7-0 FROM FILE EMBASE
	D L84 1-9 IBIB ABS
	D QUE L63
	D QUE L80
	LUS, MEDLINE, BIOSIS, EMBASE' ENTERED AT 14:12:53 ON 07 DEC 2007
31	DUP REM L63 L80 (0 DUPLICATES REMOVED)
	ANSWERS '1-24' FROM FILE HCAPLUS
	ANSWERS '25-26' FROM FILE MEDLINE
•	ANSWER '27' FROM FILE BIOSIS
	ANSWERS '28-31' FROM FILE EMBASE
	D L85 1-24 IBIB ED ABS HITIND D L85 25-31 IBIB AB HIT
	20 2 7 7 1 3 3 FILE 'HCAP 9